99B-128

## PSP Cover Sheet

| | |
|---|---|
| Proposal Title: | Proposal to Implement Decker Island Tidal Wetland Enhancement Pilot Project: *A Proposal to Create and Evaluate Anadromous and Resident Fisheries Habitat* |
| Applicant Name: | Surface Water Resources, Inc. |
| Mailing Address: | 455 Capitol Mall, Suite 600, Sacramento, CA 95814 |
| Telephone: | (916) 325-4050 |
| Fax: | (916) 446-0143 |
| Email: | main@swri.net |

Amount of funding requested: $379,000 for 3 years

Indicate the topic for which you are applying (check only one box).

| | | | |
|---|---|---|---|
| ☐ | Fish Passage/Fish Screens | ☐ | Introduced Species |
| ☒ | Habitat Restoration | ☐ | Fish Management/Hatchery |
| ☐ | Local Watershed Stewardship | ☐ | Environmental Education |
| ☐ | Water Quality | | |

Does the proposal address a specified Focused Action? ✓ yes _____no

What county or counties is the project located in? Solano County

Indicate the geographic area of your proposal (check only one box).

| | | | |
|---|---|---|---|
| ☐ | Sacramento River Mainstem | ☐ | East Side Trib: _____ |
| ☐ | Sacramento Trib: _____ | ☐ | Suisun Marsh and Bay |
| ☐ | San Joaquin River Mainstem | ☐ | North Bay/South Bay: _____ |
| ☐ | San Joaquin Trib: _____ | ☐ | Landscape (entire Bay-Delta watershed) |
| ☒ | Delta: Decker Island | ☐ | Other: _____ |

Indicate primary species which the proposal addresses (check all that apply)

| | | | |
|---|---|---|---|
| ☐ | San Joaquin and East Side Delta tributaries fall-run chinook salmon | | |
| ☒ | Winter-run chinook salmon | ☒ | Spring-run chinook salmon |
| ☒ | Late-fall run chinook salmon | ☒ | Fall-run chinook salmon |
| ☒ | Delta smelt | ☐ | Longfin smelt |
| ☒ | Splittail | ☒ | Steelhead trout |
| ☒ | Green sturgeon | ☐ | Striped bass |
| ☒ | Migratory birds | ☐ | All chinook species |
| ☐ | Other: _____ | ☐ | All anadromous salmonids |

Specify the ERP strategic objective and target(s) that the project addresses. Include page numbers from the February 1999 version of ERP Volume I and II:

- Restore tidal wetlands in Decker Island on the Port of Sacramento Property (Stage 1 Action of Fresh Emergent Wetland Habitat (Tidal), Volume 2, pg. 99);
- Convert leveed lands to tidal wetland/slough complexes in the North Delta Ecological Management Unit (Programmatic Action 1A, Volume 2, pg. 91);
- Restore 3,000 to 4,000 acres of tidal perennial aquatic habitat and 20,000 to 25,000 acres of tidally influenced freshwater marsh (Programmatic Action 2A, Volume 2, pg. 93);

Indicate the type of applicant (check only one box):

| | | | |
|---|---|---|---|
| ☐ | State agency | ☐ | Federal agency |
| ☐ | Public Non-profit joint venture | ☐ | Non-profit |
| ☐ | Local government/district | ☒ | Private party |
| ☐ | University | ☐ | Other: _____ |

Indicate the type of project (check only one box):

| | | | |
|---|---|---|---|
| ☐ | Planning | ☒ | Implementation |
| ☐ | Monitoring | ☐ | Education |
| ☐ | Research | | |

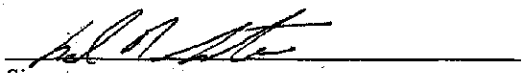
By signing below, the applicant declares the following:

1.) The truthfulness of all representations in their proposal;

2.) The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and

3.) The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

David R. Schuster
Surface Water Resources, Inc.



Signature



I-014477

# Proposal to Implement Decker Island Tidal Wetland Enhancement Pilot Project

*A Proposal to Create and Evaluate Anadromous and Resident Fisheries Habitat*

*Submitted By:*

David R. Schuster
Surface Water Resources, Inc.
455 Capitol Mall, Suite 600
Sacramento, CA 95814

Phone: (916) 325-4050
Fax: (916) 446-0143
e-mail: main@swri.net

Type of Organization: S Corporation
Tax Status: Current
Tax Identification Number: 68-0384309

*Collaborators/Project Participants:*

Hanson Environmental, Inc.
Laugenour and Meikle

April 16, 1999

## Executive Summary

The Decker Island Tidal Wetland Enhancement Pilot Project involves the restoration and monitoring of a tidal wetland on a 140-acre portion of Decker Island. The proposed aquatic and terrestrial habitat improvements will be accomplished by exposing approximately 100 acres (higher-high tide level) to tidal flows and by planting vegetation in selected areas to promote riparian and upland revegetation of the project site. Tidal flow design includes construction of a riverbank breach and two tidal feeder channels into the interior of the island. Terrestrial habitat plantings will occur in two areas—on the riverbank and on habitat mounds designed to provide habitat diversity within the newly created tidal wetland. In addition, treatment is proposed to accelerate natural revegetation and elimination of star thistle on the upland portion of the project site.

The ecological and biological objectives of the Decker Island Tidal Wetland Enhancement Pilot Project are to:

- Create self-sustaining tidally influenced wetland habitat that directly benefits special-status aquatic species (e.g., delta smelt, Sacramento splittail, all runs of chinook salmon, and steelhead), and indirectly benefits riparian and terrestrial species along the Sacramento River (between Browns Island and Cache Slough/Prospect Island) where such resources are limited.
- Structure the enhancements and monitoring program as a pilot project that provides species-specific habitat use, ecosystem development, and fish monitoring knowledge that directly benefits ongoing planning efforts for future larger-scale Delta restoration plans.

Project monitoring will focus on the process and success of restoring a tidal wetland and the use of that wetland by special-status species, particularly listed and proposed listed fish species. The two-year monitoring program will also provide important information on what physical, chemical, and biological factors appear to influence fish use of the habitats during the early stages of ecosystem development. Data collected during field surveys will be statistically analyzed using analysis of variance, multiple comparison, and regression procedures. The two-year monitoring program will be structured to provide initial data that will be used to design a longer-term (5 to 10 years) monitoring program for the site and to benefit ongoing planning efforts for future larger-scale Delta restoration plans. Because there is no existing aquatic habitat on Decker Island, there will be no need to conduct baseline fish studies.

Local landowners and land managers on Decker Island include MegaSand and the California Department of Fish and Game (CDFG). MegaSand is leasing portions of the island for sand mining and has expressed support for project implementation. The CDFG owns 35 acres at the northern (upstream) end of the island and has previously expressed support for the project

The project provides research opportunities for other agencies and interested parties. The project provides an opportunity for the California Department of Water Resources (DWR) Municipal Water Quality Investigations (MWQI) Program or other entity to study the potential effects of wetland creation on drinking water quality parameters. The MWQI Committee provided funding and developed a water quality study program for the previous CALFED Decker Island project and is anticipated to do the same with this project. The objectives of such a study would be to monitor and attempt to quantify the changes in organic carbon (TOC and DOC) that are generated by development of the wetland. Graduate students of the University of California, Davis (UCD) Department of Land, Air, and Water have also expressed preliminary study interests at the site.

The tidal wetland on Decker Island would assist CALFED with numerous ERP goals, objectives, and actions. The habitat will contribute to CALFED's goals of achieving self-sustaining populations of at-risk

native species dependent on the Delta and rehabilitating natural processes of the aquatic and associated terrestrial communities in the Bay-Delta system. In terms of CALFED objectives, the project will specifically contribute to restoration of multiple Delta species listed and proposed for listing under the Endangered Species Act (ESA), along with providing habitat for migratory bird species and enhancing Delta marsh habitat (Strategic Plan, Table 5-1, Summary of Strategic Goals and Objectives).

The project will also help implement several Sacramento-San Joaquin Delta Management Zone targets, programmatic actions, and Stage 1 Actions identified in the Ecological Management Zone Visions. These include: restoring tidal wetlands in Decker Island on the Port of Sacramento (Port) Property (Stage 1 Action of Fresh Emergent Wetland Habitat (Tidal), Volume 2, pg. 99); converting leveed lands to tidal wetland/slough complexes in the North Delta Ecological Management Unit (Programmatic Action 1A, Volume 2, pg.91); restoring 3,000 to 4,000 acres of tidal perennial aquatic habitat and 20,000 to 25,000 acres of tidally influenced freshwater marsh (Programmatic Action 2A, Volume 2, pg. 93); increasing primary and secondary productivity in the Delta through actions to restore streamflow, floodplain flooding, Delta hydraulics, tidal wetlands and sloughs, and riparian habitat (Programmatic Action 2A, Volume 2, pg. 95); and restoring 1,500 acres of shallow-water habitat in the North Delta Ecological Management Unit (Target 1 of Tidal Perennial Aquatic Habitat, Volume 2, pg. 96).

The Decker Island tidal wetland will also be a component of the North Delta Habitat Corridor. The Stage 1 proposal for the North Delta is to restore a large, contiguous habitat corridor connecting a mosaic of tidal marsh, seasonal floodplain, riparian, and upland grassland habitats (Strategic Plan, pg. 47). This project may set the stage for ecosystem projects on other Port lands in the North Delta habitat corridor, and other actions outlined in the Phase II Report. Initial project analyses have not identified any effects to third parties. MegaSand operations will not be affected by the restoration of the tidal wetland, nor would CDFG activities.

Project implementation will be accomplished over a 3-year period and will involve three phases. Prior to project implementation, CALFED and the Port of Sacramento (current landowner) will finalize an agreement for purchase of and/or designation of a permanent easement on the 140-acre project site. In either case, the project will be owned and/or managed by a yet-to-be determined public agency. Total anticipated costs, excluding the costs for acquisition of and/or easement on the 140-acre project site, will be approximately $379,000.

The project team responsible for planning, designing, and implementing the project includes Surface Water Resources, Inc. (SWRI), Hanson Environmental, Inc. (HEI), and Laugenour and Meikle (L&M). SWRI, which will be responsible for permitting, project management, and assisting with habitat improvement design and monitoring, has experience in numerous projects involving fisheries and aquatic habitats. This experience includes habitat restoration, endangered species, flow-habitat relationships, and water quality. SWRI team members also have experience in regulatory compliance, project planning, design, and construction, and consultation with the CDFG, National Marine Fisheries Services (NMFS), and U.S. Fish and Wildlife Service (USFWS). HEI will be involved in project design, endangered species consultations, monitoring design, and monitoring activities. HEI has participated in the study, design, analysis, and interpretation of fisheries and habitat data, as well as the investigation of endangered species, development of recovery plans, and preparation of aquatic habitat conservation plans for Delta fisheries. L&M will provide design engineering and conduct construction monitoring and post-construction engineering surveys. L&M has construction engineering experience involving habitat enhancements linked to flood control, fish screens and fish diversion facilities, and other drainage, water supply, and irrigation projects.

## Project Description

The Decker Island Tidal Wetland Enhancement Pilot Project involves the restoration and monitoring of a tidal wetland on a 140-acre portion of Decker Island. Preceding project implementation, CALFED will negotiate an agreement with the landowner (Port of Sacramento) for either purchase of the property for transfer to another public agency or dedication of an easement in perpetuity for project purposes.

**Location of the Project.** The project site is the 140-acre portion of Decker Island in the lower Sacramento River (northwest Delta) presently owned by the Port of Sacramento within Solano County. Decker Island is bordered on the east by Horseshoe Bend of the original Sacramento River Channel and on the west by the Deepwater Ship Channel near Rio Vista, California. The island is midway between the Suisun Bay/Marsh area and the Cache Slough/Prospect Island area. Other landowners on Decker Island include the federal government and CDFG. The federal government lands are leased for a sand mining operation and placement of dredge spoils. The CDFG land is a 35-acre parcel on the northern (upstream) tip of the island. **Figure 1** is a regional map showing the location of Decker Island. **Figure 2** is the USGS quadrangle map of the area.

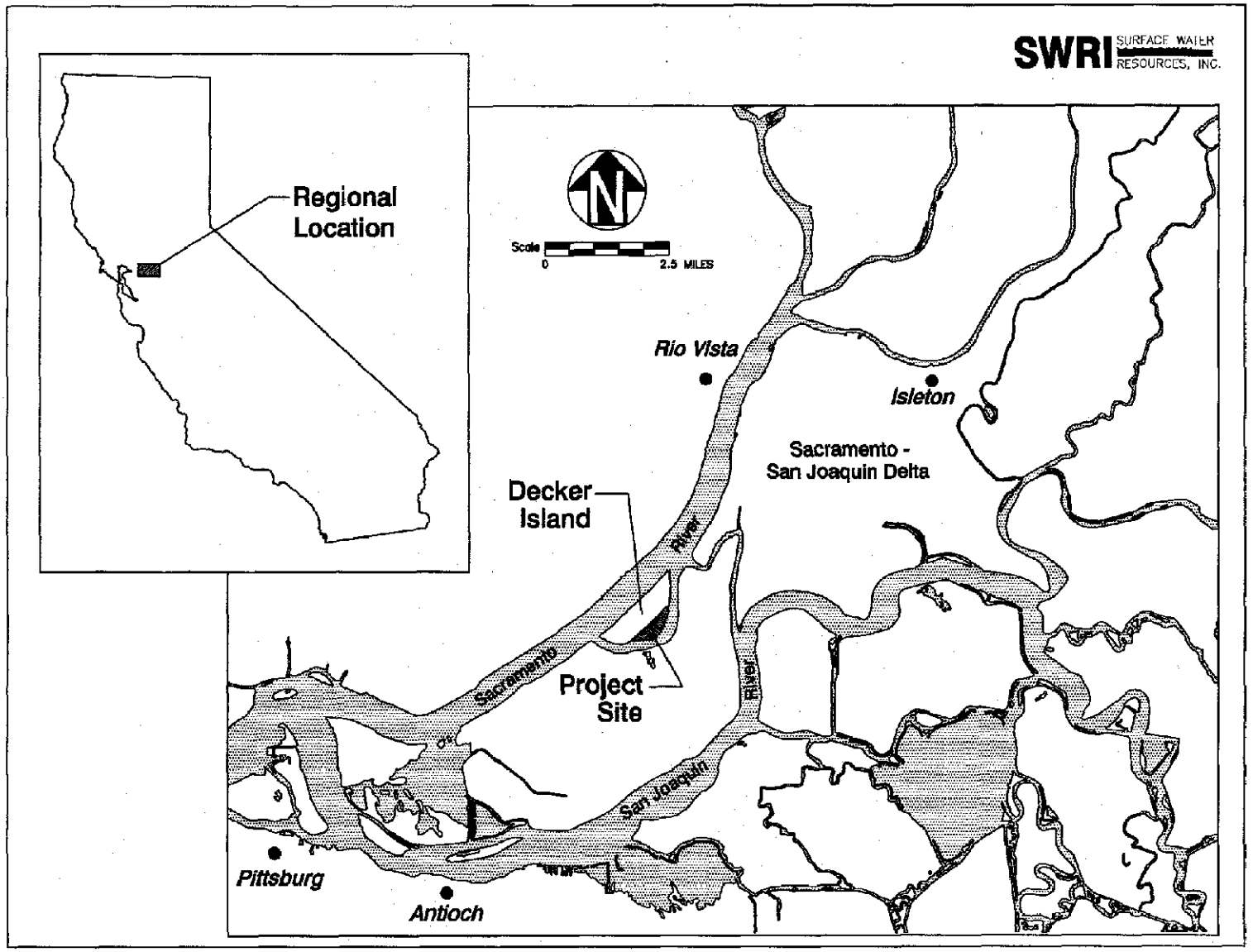
**Project Activities.** The proposed Decker Island aquatic and terrestrial habitat improvements will be accomplished by exposing approximately 100 acres (higher-high tide level) to tidal flows and by planting vegetation in selected areas to promote riparian and upland revegetation of the project site. Tidal flow design includes construction of a riverbank breach and two tidal feeder channels into the interior of the island. Terrestrial habitat plantings will occur in two areas—on the riverbank and on habitat mounds designed to provide habitat diversity within the newly created tidal wetland. In addition, treatment is proposed to accelerate natural revegetation and elimination of star thistle on the upland portion of the project site. **Figures 3** and **4** show the overall project design relative to the 140-acre site.

***Constructed Improvements***. Constructed improvements will include a riverbank breach, excavation of feeder channels, and creation of habitat mounds (Figure 3 and **Figure 5**). A breach will be made to the southwestern end of the project area riverbank to allow tidal flows onto the project site. The breach location was identified in consideration for the amount of excavation required, existing riparian vegetation, and potential routing of water to and from the interior wetland area. Adequate breach design dimensions have been determined to be 125-foot top width at mean higher-high tide level, with cross-sectional area of 640 square feet below mean higher-high tide level, and with a bottom width of 18 feet, side slopes of approximately 1:5, and a bottom elevation of -3.5 feet. Review of the preliminary project design by the Interagency Ecological Program (IEP) Resident Species Coordination Team in February 1998 has led to suggestions to vary the slopes on each side of the breach to diversify habitat. This suggestion will be further investigated during final design of the riverbank breach.

Two feeder channels will assist in routing of the flood tide, minimize ponding during ebb tide, and diversify aquatic habitat. The bottom slope of the southern channel was designed for the elevation of the existing topographical low areas. The channels will always contain water except under extremely low tide events. The channels were designed using standard open channel design methodology for uniform flow given estimated flow rate, roughness and bottom slope restrictions. The proposed design dimensions of the channels are a bottom width of about 6 feet and side slopes of 1:3 with top width variable depending on depth as determined by bottom slope and topography.

To further diversify wetland plant communities, four or more habitat mounds will be constructed. Generally, the mounds will be conical in shape and vary in width with side slopes of 1:3 to 1:10.

Figure 1 - Regional Location and Project Area



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## Figure 2: USGS Quad Area of Decker Island

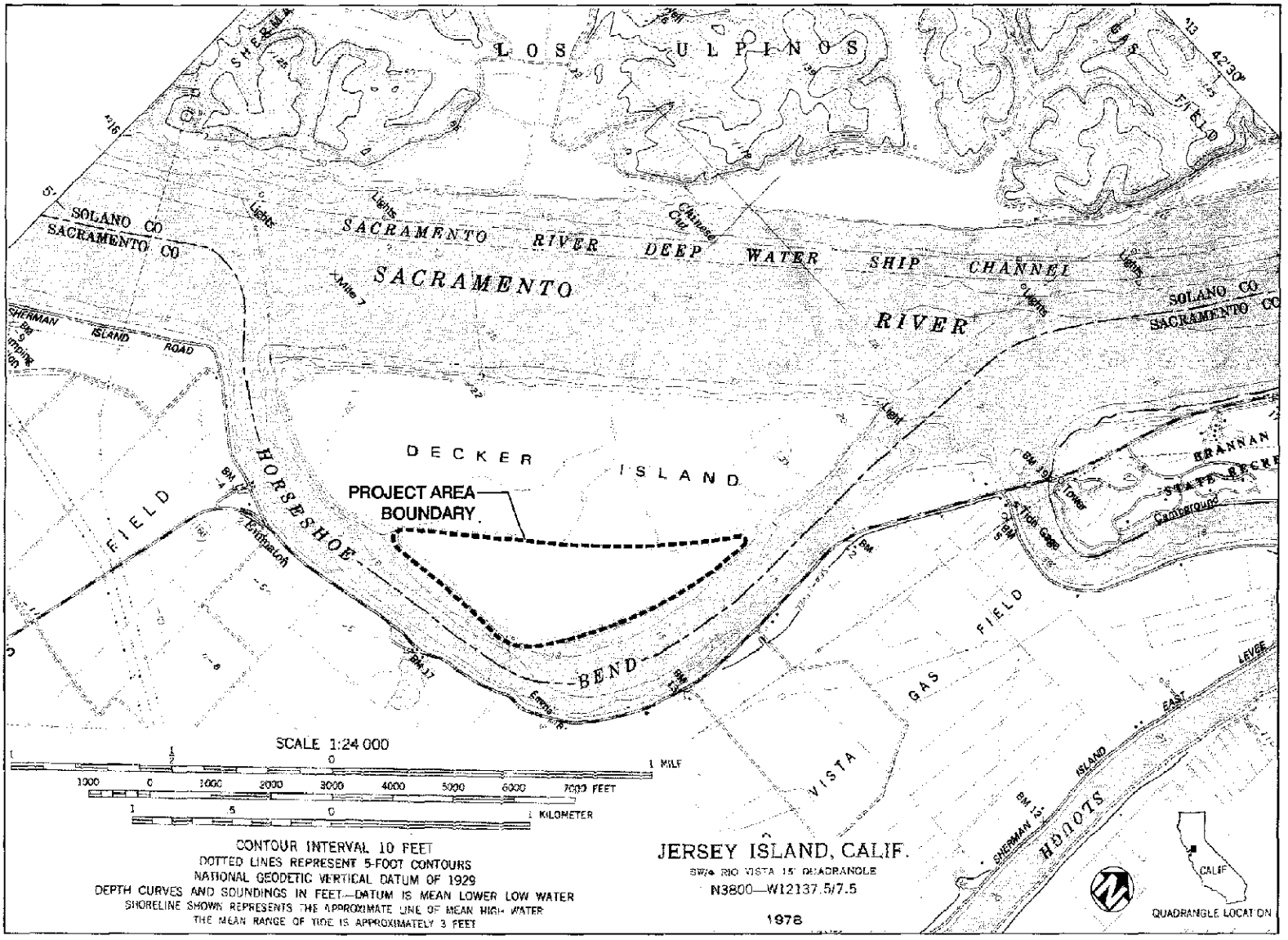


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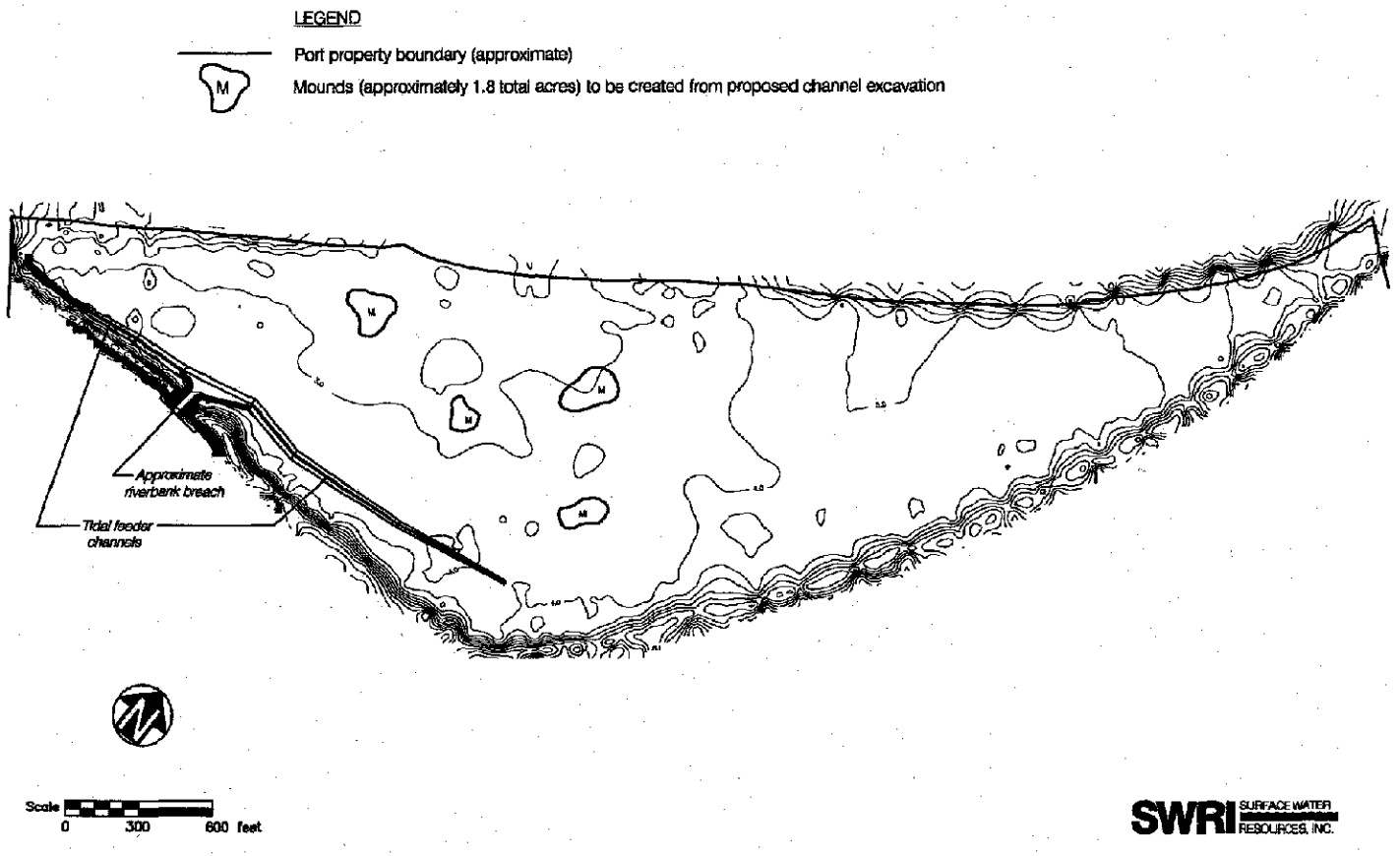
**Figure 3**

# DECKER ISLAND TIDAL WETLAND ENHANCEMENT PILOT PROJECT




SWRI SURFACE WATER RESOURCES, INC.

*DRAFT - Subject to Revision 4/6/99*



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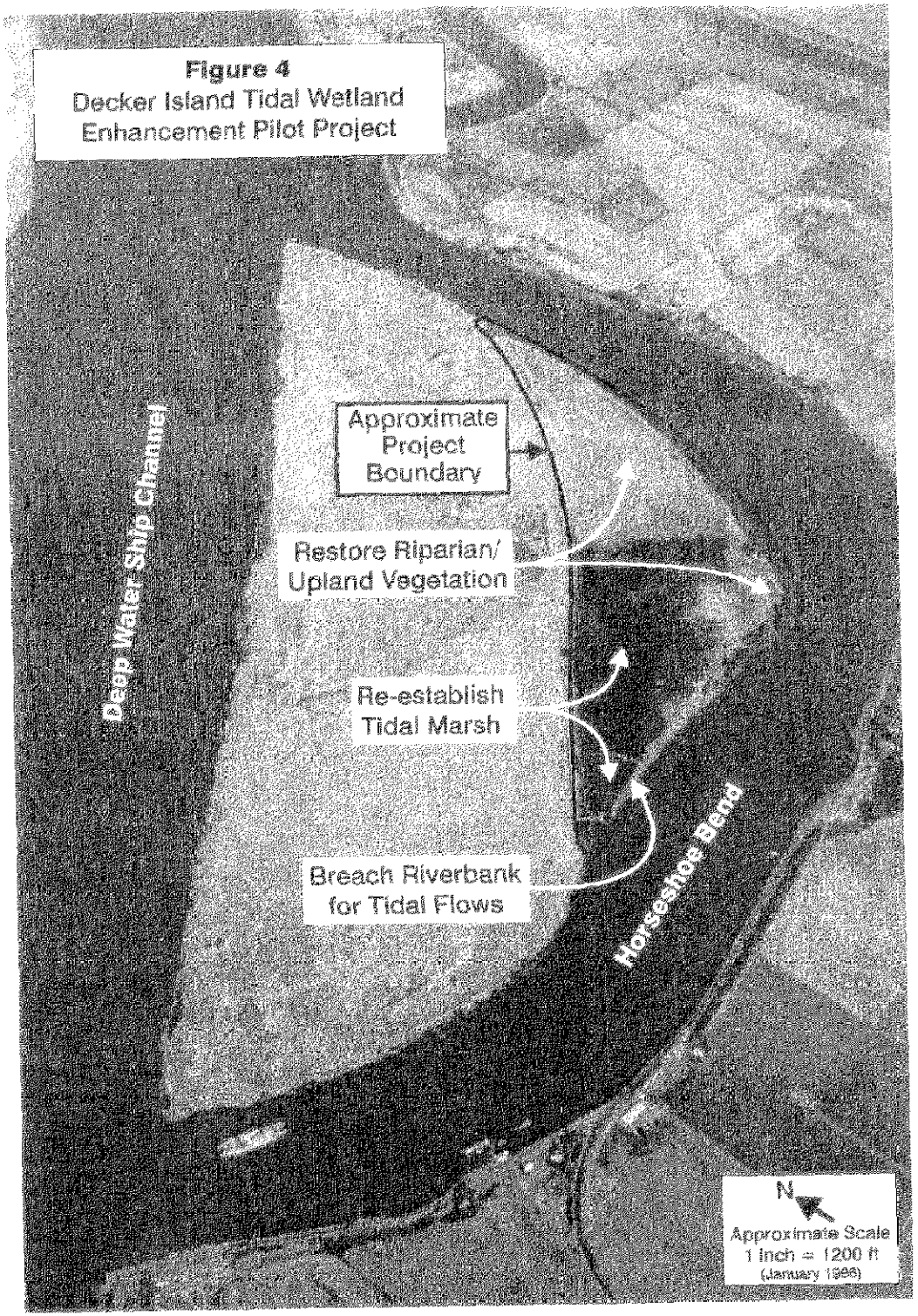
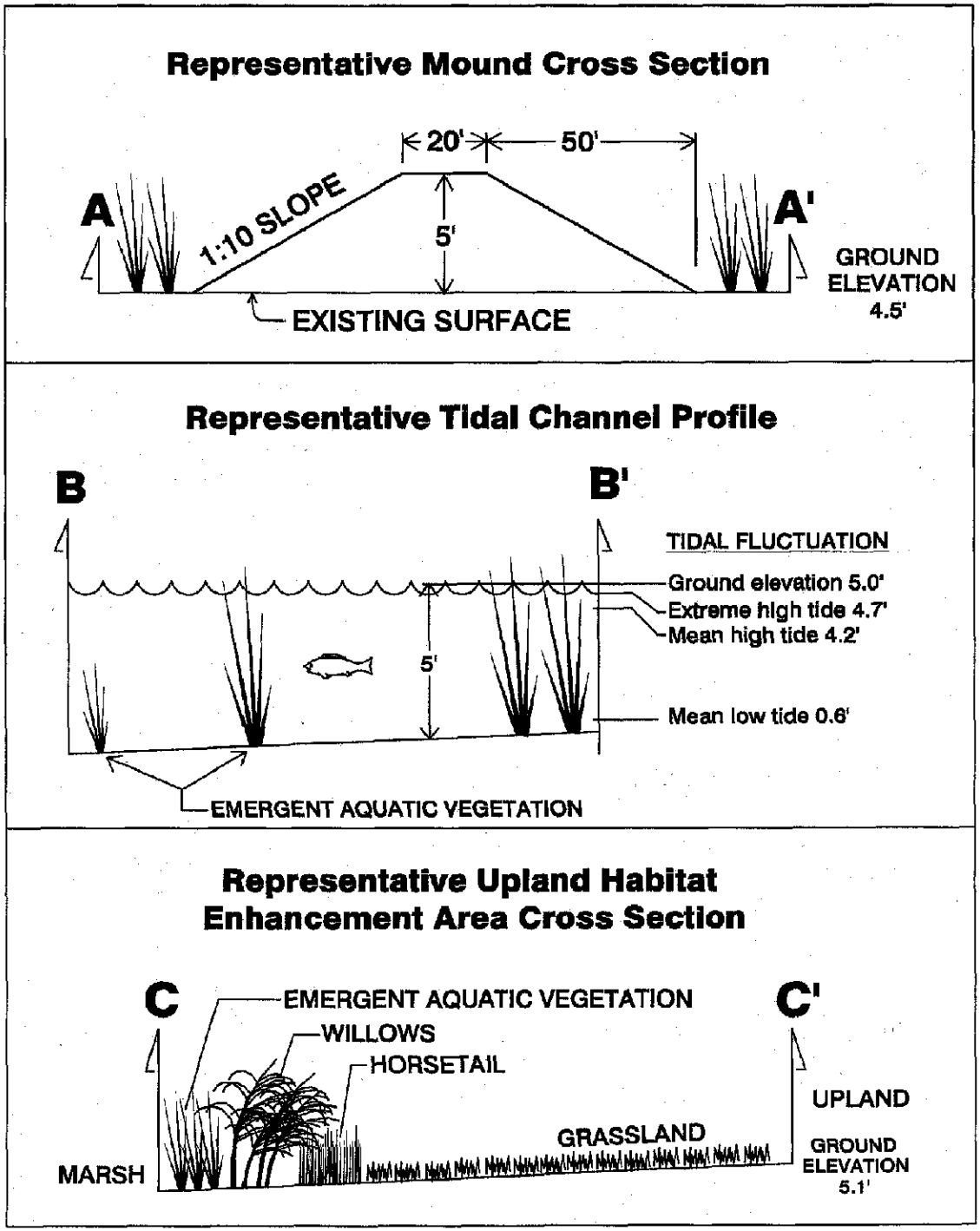


Figure 4
Decker Island Tidal Wetland
Enhancement Pilot Project
Approximate
Project
Boundary
Restore Riparian/
Upland Vegetation
Re-establish
Tidal Marsh
Breach Riverbank
for Tidal Flows
Deep Water Ship Channel
Horseshoe Bend
N
Approximate Scale
1 inch = 1200 ft
(January 1998)

Figure 5: Project Components

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***Vegetation Plantings***. Vegetation will be planted on habitat mounds and on the riverbank. Plantings include mugwort (*Artemisia douglasiana*), wild rose (*Rosa californica*), wild grape (*Vitis californica*), box elder (*acer negundo californicum*), Fremont cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), and willow (*Salix hindsiana* and/or *S. laseolepis*). In addition, a mix of native grasses and forbs will be established in the area of the riverbank breach. Due to the elevation variations at the site, species tolerant of greater periods of inundation (e.g., willows) will be planted at lower elevations while those species (e.g., cottonwoods) less tolerant of inundation will be placed at higher elevations, such as the upper bank slope and the tops of mounds. Control measures will be implemented to reduce populations of star thistle.

***Special-Status Species***. With establishment of the tidal wetland, the project site will provide habitat for populations of special-status species. The project has been designed to increase habitat for listed and proposed listed species including delta smelt (*Hypomesus transpacificus*), Sacramento splittail (*Pogonichthys macrolepidotus*), all Sacramento River runs of chinook salmon (*Oncorhynchus tshawytscha*), and steelhead (*Oncorhynchus mykiss*). The wetland and adjacent upland habitats on Decker Island could provide habitat for several terrestrial species, including giant garter snake (*Thamnophis gigas*), Swainson's hawk (*Buteo swainsoni*), California black rail (*Laterallus jamaicensus*), California clapper rail (*Rallus longirostris*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*).

Final project design will also consider creation of adequate habitat conditions for the establishment of rare plant populations such as the Delta mugwort (*Limosella subulata*), California hibiscus (*Hibiscus lasiocarpus*), or Mason's lilaeopsis (*Lilaeopsis Masonii*), as well as the enhancement of an existing population of the Suisun marsh aster (*Aster lentus*).

***Project Implementation***. Following completion of final design, construction bids will be solicited to install the physical features and plants. The earthwork is anticipated to require between two and four weeks including mobilization. Construction of the tidal feeder channels and habitat mounds will occur first with approximately 13,500 cubic yards of material excavated for the channels, which will be used to construct the mounds. The riverbank breach will be performed after all channel excavation and mound work is completed, during low tide, and from the riverbank. Approximately 3,500 cubic yards of material will be excavated for the breach. Preliminary construction planning indicates that all earthwork could be completed by one scraper, one backhoe, and one dump truck. Channel sizing and sideslopes and riverbank breach design are in accordance with U.S. Army Corps of Engineers (Corps) guidelines for minimizing scour and sedimentation in tidal environments. Equipment on the project site will be limited to designated routes and areas impacted by vehicles will be smoothed.

The vegetation plantings will be accomplished in two phases. The first phase will immediately follow project construction to help control erosion and minimize establishment of non-native plant species. The second phase of revegetation will consist of planting trees and shrubs on the riverbank and habitat mounds, along with further seeding of the mounds and riverbank. During this second phase, a mixture of roughly 1,000 cuttings, bare root stock, and liner stock will be planted. Final revegetation plans will depend on as-built conditions of the overall project, final mound configuration, and final elevation contours.

Planting and fertilization to promote root development will occur in the beginning of the wet season, thereby providing plants time to establish a root system prior to the dry season. Given tidal and groundwater conditions, this should eliminate the need for an irrigation system. However, if at the time of planting soil moisture is considered to be inadequate, or if there are signs of inadequate seed germination and seedling survival, a temporary irrigation system could be installed at the site for a limited time to increase success. Additionally, other measures will be implemented to increase the survival and

propagation of species planted as part of the project as well as other desirable native plant species. These measures could include placing wire mesh around the bases of tree plantings to provide protection from beavers and rabbits and placing wire mesh in a bowl shape around roots to protect the seedlings from gophers during establishment.

***Project Monitoring.*** After project construction, a two-year monitoring program will be undertaken to provide information on the use of the tidal wetland by special-status fish species and other protected species. The reestablishment of the tidal wetland and upland habitat improvements will be periodically photo-documented. The data collected would be used to assess early transitions in hydraulic, water quality, and biological conditions. A more detailed description of project monitoring activities is provided in the Monitoring and Data Collection Methodologies section on page 10.

**Proposed Scope of Work.** The project involves three phases. Phase I includes finalization of the project design, compliance with CEQA and NEPA (as applicable), development of the monitoring/methods program, and acquisition of required permits. The Final Project Design Report, revised and final Initial Study/Environmental Assessment, proposed and adopted Negative Declaration and Finding of No Significant Impact (FONSI), as appropriate, and Project Monitoring/Methods Plan will be the deliverables completed during this phase. Along with the scientific collection permit, other permits and approvals may be required including a Streambed Alteration Agreement, Section 404 Permit, water quality certification, Solano County grading permit, and written concurrence from the USFWS, NMFS, and the CDFG of no adverse project effects to ESA listed and proposed listed species.

Project construction and vegetation plantings will occur during Phase II. Construction bids will be solicited and contract(s) awarded based on applicable CALFED contracting requirements. Construction activities will be monitored by a construction inspector and completed work will be documented. A project Construction Report documenting as-built conditions will be prepared and submitted to CALFED at the conclusion of this project phase.

Phase III involves a two-year post-construction monitoring program. Specific information will be collected to assess utilization of the restored wetland by juvenile and larval life stages of special-status fish species, utilization of different habitat types by special-status fish species, relationships between habitat conditions and fish species use, rates and successional patterns of vegetation communities, and success of revegetation efforts. Data will be collected through seining, light trapping, water quality measurements, and surveys. Monitoring results will be presented in annual monitoring reports.

An additional task will include project management, which will occur through all project phases. As a part of this task, quarterly progress reports will be prepared and submitted to CALFED. Other project management tasks will include subcontract administration, budget and deliverable tracking, and quality assurance and reviews by senior technical team members. The project schedule is provided in the Cost section of the proposal on page 14.

If the entire project cannot be funded, inseparable tasks would include final design of the riverbank breach, permit acquisition, construction of the riverbank breach, project monitoring, and project management.

## Ecological/Biological Benefits

***Project Objectives.*** The ecological and biological objectives of the Decker Island Tidal Wetland Enhancement Pilot Project are to:

- Create self-sustaining tidally influenced wetland habitat that directly benefits special-status aquatic species (e.g., delta smelt, Sacramento splittail, all runs of chinook salmon, and steelhead), and indirectly benefits riparian and terrestrial species along the Sacramento River (between Browns Island and Cache Slough/Prospect Island) where such resources are limited.
- Structure the enhancements and monitoring program as a pilot project that provides species habitat use, ecosystem development, and fish monitoring knowledge that directly benefits ongoing planning efforts for future larger-scale Delta restoration plans.

***Project Need.*** While tidal wetland habitat has been shown to be important for special-status fish species, more conclusive information is needed on the function of tidal wetlands as habitat for splittail and Delta smelt, and as rearing habitat for chinook salmon and steelhead. There is an underlying assumption to ecosystem restoration projects that the limited extent of wetland habitat is restricting the populations of species of interest in the Delta. However, this premise has not been tested for many species in the estuary (CALFED ERP Volume 1, Pg.111). This project, because of its relatively controlled setting (one point for tidal flow and limited area) and its location on the Sacramento River, will provide information on the use of the tidal wetland by several aquatic and terrestrial species and will provide some insight into the validity of this assumption.

***Project Focus.*** This project focuses on tidal wetland habitat and its relationship to selected fish species listed, or proposed for listing, under the ESA (i.e., delta smelt, Sacramento splittail, steelhead, and all Sacramento River runs of chinook salmon). For chinook salmon and steelhead, Decker Island and adjacent shoal areas in Horseshoe Bend may represent important rearing habitat. Decker Island is also located within the "critical habitat" area designated for delta smelt. Flooded island habitats have been identified by the NMFS as one of the elements to promote recovery of the delta smelt (*Recovery Plan for the Sacramento/San Joaquin Delta Native Fishes*, 1997). Shallow water tidal marsh habitat is also known to be valuable to splittail. The project also will revitalize an existing cottonwood gallery on the Horshoe Bend riverbank, which supports a heron rookery.

The habitat created by this project will also help to offset habitat loss and degradation that have occurred along this section of the Sacramento River as a result of stressors related to levee and bank stabilization, water diversions, dredging, invasive aquatic species, and project-site-specific grazing pressure on riparian and intertidal vegetation along the shoreline of Horseshoe Bend.

***Project Benefits.*** This project will have numerous benefits, both primary and secondary, including:

- permanent removal of grazing pressure on current project site riparian and inter-tidal habitat;
- increased habitat for numerous special-status fish, waterfowl, other wildlife, and plant species;
- greater understanding of the hydraulic and biological processes for tidal wetlands and the use of shallow water habitat by resident Delta fish species and anadromous fish species; and
- an increase (140 acres) in the amount of Delta land dedicated to ecosystem enhancements.

Benefits will also be realized indirectly. These secondary benefits include:

- increased primary productivity and nutrient cycling; and
- valuable information for future Delta wetland restoration projects.

***Project Questions/Hypotheses.*** Questions to be addressed in the proposed and future monitoring efforts at Decker Island include:

- Will larval and juvenile life stages of the target fish species (e.g., chinook salmon, steelhead, delta smelt, and splittail) utilize the restored wetland?
- Do the fish species and life stages using the restored wetland use the various habitat types created differentially?
- What are the relationships between specific water quality parameters (e.g., salinity) and target fish species use of the restored wetland habitats monitored?
- What are the growth rates and successional patterns of riparian and intertidal vegetation communities where restoration plantings are made?
- Is vegetation planting an effective measure in wetland restoration?
- Are the restoration techniques used in this pilot project successful in restoring and maintaining the physical habitat features?
- Will the restoration techniques applied in this pilot study effectively control the proliferation of invasive non-native plant species?

***Project Durability.*** The project emphasizes the development of a permanent, self-sustaining system. Approximately 100 acres of the project site will become a tidal wetland, with the remaining 40 acres as riparian and upland habitat. Integration of aquatic, riparian, and upland ecosystem components characteristic of a variety of native Delta habitats provides an ecosystem-based approach for the project. This project will be a cost-effective contribution to CALFED's adaptive management approach to ecosystem restoration because it serves as a comprehensive ecosystem restoration model which, although on a small scale, will provide valuable information applicable to larger scale projects.

***Relationship to Past and Future Projects.*** The increase in habitat for special-status fish species will contribute to goals of the Central Valley Project Improvement Act (CVPIA) Anadromous Fisheries Restoration Program, endangered species recovery plans implemented as part of the ESA including the *Recovery Plan for the Sacramento/San Joaquin Delta Native Fishes* (USFWS 1996) and the NMFS proposed *Recovery Plan for the Sacramento River Winter-Run Chinook Salmon* (NMFS 1997). The wetland will also serve as waterfowl habitat which will benefit the Central Valley Habitat Joint Venture, a component of the USFWS's North American Waterfowl Management Plan. Future projects that would benefit from an increase in special-status fish habitat include recovery plans for delta smelt, splittail, steelhead, and chinook salmon.

***Current Project Status.*** The project was initiated in 1996 as part of the Category III funded proposals. As part of the project, grazing was indefinitely eliminated from the Port's property in 1997. During 1997 and 1998, a draft project design and draft monitoring program were developed, along with monitoring and research programs associated with DWR and UCD. In early 1998, an agreement on land rights could not be reached, and the project stopped following the February 1998 Briefing to the IEP. The current proposal enlarges the project area to 140 acres, from the original 70 acres proposed.

***Relationship to ERP Future Actions and Goals.*** The tidal wetland on Decker Island will assist CALFED with numerous ERP goals, objectives, and actions. The habitat will contribute to CALFED's goals of achieving self-sustaining populations of at-risk native species dependent on the Delta and rehabilitating natural processes of the aquatic and associated terrestrial communities in the Bay-Delta system. In terms of CALFED objectives, the project will specifically contribute to restoration of multiple Delta species listed and proposed for listing under the ESA, along with providing habitat for migratory bird species and enhancing Delta marsh habitat (Strategic Plan, Table 5-1, Summary of Strategic Goals and Objectives).

The project will also help implement several Sacramento-San Joaquin Delta Management zone targets, programmatic actions, and Stage 1 Action, identified in the Ecological Management Zone Visions. These actions include:

- Restore tidal wetlands in Decker Island on the Port of Sacramento Property (Stage 1 Action of Fresh Emergent Wetland Habitat (Tidal), Volume 2, pg. 99);
- Convert leveed lands to tidal wetland/slough complexes in the North Delta Ecological Management Unit (Programmatic Action 1A, Volume 2, pg.91);
- Restore 3,000 to 4,000 acres of tidal perennial aquatic habitat and 20,000 to 25,000 acres of tidally influenced freshwater marsh (Programmatic Action 2A, Volume 2, pg. 93);
- Actions to restore streamflow, floodplain flooding, Delta hydraulics, tidal wetlands and sloughs, and riparian habitat would increase primary and secondary productivity in the Delta (Programmatic Action 2A, Volume 2, pg. 95); and
- Restore 1,500 acres of shallow-water habitat in the North Delta Ecological Management Unit (Target 1 of Tidal Perennial Aquatic Habitat, Volume 2, pg. 96).

The Decker Island tidal wetland will also be a component of the North Delta Habitat Corridor. The Stage 1 proposal for the North Delta is to restore a large, contiguous habitat corridor connecting a mosaic of tidal marsh, seasonal floodplain, riparian, and upland grassland habitats (Strategic Plan, pg. 47). This project may set the stage for ecosystem projects on other Port lands in the North Delta habitat corridor, and other actions outlined in the Phase II Report.

***Relationship to Legal Obligations and Agency Mandates.*** The project is not associated with any legal obligations or agency mandates.

***System-Wide Ecosystem Benefits.*** This tidal wetland restoration project will provide numerous system-wide ecosystem benefits. In addition to complementing programs and plans related to the CVPIA, ESA, and other habitat ventures as presented above, the project will provide geographically strategic habitat between existing upstream and downstream habitat, such as that provided by Suisuin Marsh and Prospect Island.

***Benefits and Conflicts to Other CALFED Objectives.*** CALFED has identified four problem areas and objectives to address those areas, which include Ecosystem Quality, Water Quality, Water Supply Reliability, and Levee System Integrity. As discussed above, the project will provide many benefits to the area of Ecosystem Quality. The project will also provide an opportunity to study the effect of wetland creation upon Water Quality that cannot be accomplished elsewhere. Specifically, the project provides an opportunity for DWR's MWQI Program or other entity to study the potential effects of wetland creation on drinking water quality parameters. The MWQI Committee provided funding and developed a water quality study program for the previous CALFED Decker Island project and is anticipated to do the same with this project. The objectives of such a study would be to monitor and attempt to quantify the changes in organic carbon (TOC and DOC) that are generated by development of the wetland. Graduate students of the UCD Department of Land, Air, and Water have also expressed preliminary study interests at the site.

***Benefits and Conflicts to Other CALFED Programs.*** CALFED has developed eight program elements to carry out the strategies planned for the above-mentioned problem areas. Direct benefits will occur for both the Ecosystem Restoration Program and the Water Quality Program. The project will not conflict with the development or implementation of any program measures or activities.

***Third Party Benefits.*** Decker Island is a remote site that could provide research opportunities to third parties, including state and federal agencies, universities, and conservation organizations.

***Project Alternatives.*** Project alternatives include various configurations and number of riverbank breaches, feeder channels, and habitat mounds. Early project plans considered multiple riverbank breaches, however, it was decided to have one breach to reduce costs, minimize environmental effects, and maintain optimum hydraulic conditions for tidal flows. An increased number of feeder channels and differing shapes, such as a "U" shape, were considered. It was determined that "U"-shaped channels could lead to drainage problems and an increased number of feeder channels might limit the extent of usable habitat. Third-order "engineered" channels were dismissed in favor of allowing tidal-generated small-channel development

***Compliance with Applicable Environmental Laws, Approvals, and Requirements.*** On December 8, 1997, the Commission of the Port of Sacramento considered and issued a proposed Negative Declaration for the project. No substantive comments were received during the 30-day noticing period. Verbal comments from nearby landowners regarding project location were addressed without issue. Verbal comments were also received from the CDFG and concerned construction sequencing, survey for the Suisun marsh aster, and design of the riverbank breach. The CDFG's comments were addressed through explanation of the proposed staging of construction activities, and by affirming the project plans to survey for marsh aster prior to construction.

Following the 30-day public review period, DWR submitted a letter to the Port raising certain questions regarding the potential effects of the project including water quality and changes in local populations of endangered species. These comments were discussed with DWR representatives and have been considered in preparing the project design. DWR's interest in potential water quality effects led to its earlier plans to conduct a water quality monitoring program as discussed in the previous section.

A revised proposed Negative Declaration may need to be issued depending on tidal design. Further, several permits and agreements may have to be obtained for the project. These include a scientific collection permit, Nationwide 27 Permit from the Corps, a Streambed Alteration Agreement from the CDFG, ESA and CESA consultations, a water quality certification from the Central Valley Regional Water Quality Control Board (RWQCB), and a grading permit from Solano County. To obtain the Section 404 Permit and complete the ESA consultation, the project may need to comply with the National Environmental Policy Act (NEPA). It is anticipated that the California Environmental Quality Act (CEQA) document completed for the project could be used with minor modification to fulfill NEPA requirements.

Regardless of the final land rights agreement between CALFED and the Port (i.e., either securing a permanent easement or outright purchase), responsibility for post-project site management will be conveyed to another public agency.

***Project Constraints.*** The only project constraint that could affect the project schedule is land rights negotiations between the Port and CALFED. Prior to any work being performed on the project, a final agreement for land rights will need to be reached between the Port and CALFED. Once the agreement is reached, Phase I of the project, final design, could move forward.

## Monitoring and Data Collection Methodology

**Biological/Ecological Objectives.** Project monitoring will focus on the process and success of restoring a tidal wetland and the use of that wetland by special-status species, particularly listed and proposed listed fish species. The two-year monitoring program will also provide important information on what physical, chemical, and biological factors appear to influence fish use of the habitats during the early stages of ecosystem development. The two-year monitoring program will be structured to provide initial data that will be used to design a longer-term (5 to 10 years) monitoring program for the site and to benefit ongoing planning efforts for future larger-scale Delta restoration plans. Because there is no existing aquatic habitat on Decker Island, there will be no need to conduct baseline fish studies.

**Monitoring Parameters and Data Collection Approach.** Monitoring will be performed to assess the trends and seasonal differences in the tidal wetlands over the first two years, primarily focusing on fish, vegetation plantings, and water quality. Periodic field surveys, collections, and water sampling will measure physical, chemical, and biological parameters within the restored wetland and in the near-shore zone along the Horseshoe Bend area. Specific monitoring locations will be determined after the project design has been finalized. Physical parameters include depth, tidal condition, and channel erosion and sedimentation patterns. Chemical parameters include temperature, dissolved oxygen, turbidity, salinity, conductivity, and pH. Biological parameters consist of vegetation communities (emergent, submerged, and floating), fish composition (including species and life stage) and relative abundance, and vegetation plantings success and development (**Table 1**).

Monthly surveys will include seining for fish, visual inspections of plantings, and measurements of temperature, turbidity, salinity, dissolved oxygen, conductivity, and pH. Light traps for larval fish may be used depending on final design of the monitoring program. Final design of the monitoring program will be developed with the participation of the IEP and will be used to establish protocols to be followed throughout project monitoring activities.

**Data Evaluation Approach**. Data collected will be used to assess fish use of different aquatic habitat types created by the project. Data of fish populations within Horseshoe Bend will be reviewed and evaluated, relative to project data collection and analysis. The monitoring program will determine, to the extent possible, physical and chemical factors explaining fish species composition, distribution, and relative abundance. Evaluation and monitoring of vegetation will be performed to assess the condition and success of the project plantings over time, as well as the colonization of the wetland by emergent wetland and non-planted species. Data collection will also supply information for the assessment of habitat use by special-status wildlife species. Data collected during field surveys will be statistically analyzed using analysis of variance, multiple comparison, and regression procedures (Table 1).

***Reports and Information Management.*** Annual reports will be prepared on a calendar year basis that summarize the results of the monitoring programs and provide the field data collected during the preceding year. Interpretation of the data will be provided to the extent possible and trends and projections of ecosystem transition will be noted. Specific evaluations will address the use and distribution of special-status fish species. Results of the monitoring program will be presented to the IEP for peer review. Copies of annual reports will be distributed to interested agencies, project participants, and CALFED representatives.

**Table 1. Monitoring and Data Collection Information**
**Biological/Ecological Objectives**

| Hypothesis/Question to be Evaluated | Monitoring Parameter(s) and Data Collection Approach | Data Evaluation Approach | Comments/Data Priority |
|---|---|---|---|
| 1. Will larval and juvenile life stages of the target fish species (e.g., chinook salmon, steelhead, delta smelt, and splittail) utilize the restored wetland?<br>$H_O$: Juvenile life stages of the target fish species will not use the restored wetland habitat.<br>$H_A$: Juvenile life stages of the target fish species will use the restored wetland habitat. | Survey the young-of-the-year fish assemblages using the restored wetland monthly, using seining, light traps, and potentially other techniques for collecting juvenile fishes in vegetated habitats. | Based on sampling data, define the seasonal use of the restored wetland by the target fish species. In addition, document the overall seasonal species richness, composition, and relative abundance of young-of-the-year fishes using the restored wetland. | Species richness will define the number of species using the wetland, whereas species composition will define which species are using the wetland. Catch-per-unit-effort (CPUE) for specified sampling techniques will be used to describe the relative abundance of fishes at each sampling location. Data priority is high. |
| 2. Do the fish species and life stages using the restored wetland use the various habitat types created differentially?<br>$H_O$: Specific fish species and life stages using the restored wetland do not selectively use the various habitat types monitored.<br>$H_A$: Specific fish species and life stages using the restored wetland selectively use the various habitat types monitored. | Fish surveys conducted to address this question, and #1 (above), will be conducted under a repeated measures, stratified-random sampling design. The restored wetland will be stratified by distinct habitat types (e.g., feeder channels, intertidal areas, water-mound interface, emergent vegetation), with fish sampling conducted repeatedly over time at replicate sites for each habitat assessed. | Determine the relative abundance of fish species and life stages utilizing each wetland habitat type monitored. Using statistical procedures (e.g., analysis of variance, including use of analysis of variance by ranks as warranted and Tukey multiple comparison test), relate relative abundance of fishes sampled to habitat type. CPUE data will be transformed by taking the logarithm of CPUE values plus 1. For analysis of variance procedures, the time factors will be regarded as a repeated measure. A physical characterization of each wetland habitat type monitored will be made. | This analysis will assess the effect of physical habitat characteristics on fish distribution within the wetland. Both parametric and nonparametric statistical procedures will be used, as appropriate, for conducting data analyses. Data priority is high. |



I-014494

| Table 1. Monitoring and Data Collection Information<br>Biological/Ecological Objectives | | | |
|---|---|---|---|
| **Hypothesis/Question to be Evaluated** | **Monitoring Parameter(s) and Data Collection Approach** | **Data Evaluation Approach** | **Comments/Data Priority** |
| 3. What are the relationships between specific water quality parameters (e.g., salinity) and target fish species use of the restored wetland habitats monitored?<br>$H_O$: Target fish species use of the wetland habitats monitored is not affected by water quality.<br>$H_A$: Target fish species use of the wetland habitats monitored is affected by one or more water quality parameters. | Measure temperature, dissolved oxygen, salinity, turbidity, conductivity, and pH levels at the time and location of fish sampling. | Apply appropriate statistical procedures (e.g., multi-factor analysis of variance, including use of analysis of variance by ranks, regression) to determine whether the water quality parameters monitored significantly influence fish relative abundance (CPUE) within the wetland and, to the degree possible, at specified habitat types. | This analysis will assess the effect of the water quality parameters specified on fish distribution within the wetland. Data priority is moderate. |
| 4. What are the growth rates and successional patterns of riparian and intertidal vegetation communities where restoration plantings are made?<br>$H_O$: Growth rates and succession within riparian and intertidal vegetation communities will not be affected by restoration plantings<br>$H_A$:.Growth rates succession within riparian and intertidal vegetation communities are affected by one or more involved restoration planting. | Delineate all planted areas as well as unplanted control sites. The total area available will be stratified geographically by habitat type, and survey sites selected randomly from each habitat type. Vegetation surveys, using established transects within the selected sites, will be performed monthly from March through September. | Riparian and intertidal plant species richness, composition, cover, and distribution will be documented and compared over time, both within and among sites surveyed. Survival rates for various species of vegetation planted will be estimated. | Data priority is high. |



I-014495

| Table 1. Monitoring and Data Collection Information<br>Biological/Ecological Objectives | | | |
|---|---|---|---|
| **Hypothesis/Question to be Evaluated** | **Monitoring Parameter(s) and Data Collection Approach** | **Data Evaluation Approach** | **Comments/Data Priority** |
| 5. Is vegetation planting an effective measure in wetland restoration?<br>$H_O$: Planted sites do not maintain or increase (over time) their community differences (e.g., vegetation species richness, composition, cover, and distribution) that were initially established by planting efforts.<br>$H_A$: Planted sites maintain and/or increase (over time) their community differences (e.g., species richness, composition, cover, and distribution) that were initially established by planting efforts. | Monthly vegetation surveys conducted at planted and unplanted sites, as described under #4 and #5 (above). | Estimate the survival rates for various species planted, and compare community structure (e.g.,species richness, composition, cover, and distribution) between restored and unrestored sites. | Comparisons between restored and restored sites will primarily be descriptive in nature, but statistical procedures will be applied, as appropriate and warranted, to effectively address the question and associated hypothesis. Data priority is high. |
| 6. Are the restoration techniques used in this pilot project successful in restoring and maintaining the physical habitat features?<br>$H_O$: The restoration techniques of this pilot project do not affect restoration of the native characteristics described.<br>$H_A$: The restoration techniques of this pilot project effectively restore identified native characteristics. | Monitor the physical condition of the feeder channels, habitat mounds, riverbank breach, and vegetation plantings monthly over time. | Evaluate the condition of these key project features in relation to their: 1) characteristics upon initial construction; and 2) ultimate target or design characteristics. | This assessment, coupled with #4 and #5 (above), will document the degree to which physical design features were successfully created and maintained within the restored wetland habitat. Data priority is high. |

| Table 1. Monitoring and Data Collection Information<br>Biological/Ecological Objectives | | | |
|---|---|---|---|
| **Hypothesis/Question to be Evaluated** | **Monitoring Parameter(s) and Data Collection Approach** | **Data Evaluation Approach** | **Comments/Data Priority** |
| 7. Will the restoration techniques applied in this pilot study effectively control the proliferation of invasive non-native plant species?<br>$H_O$: The restoration techniques in this pilot project do not affect the proliferation of invasive non-native plant species.<br>$H_A$: The restoration techniques applied in this pilot project effectively control the proliferation of non-native invasive plant species. | Using the approach applied in #4 (above), vegetation surveys using established transects will be performed monthly from March through September in restored and unrestored (control) areas. | Evaluate the presence of non-native plant species (1) prior to initial construction; and (2) at intervals corresponding to monitoring of progress in riparian and intertidal vegetation communities. | Data priority is moderate. |



I-014497

## Local Involvement

***County Notification.*** Gary Lane of the Solano County Department of Environmental Management received a copy of the Initial Study/Proposed Negative Declaration completed for the project in December 1997. No written comments were received from the County on the project. Recent discussions with the County indicate a general concern that agricultural lands in the Delta are being converted to non-agricultural uses through programs such as this. The County also indicates that, depending upon final land negotiations, County approval for conversion of the land to wetland/ecosystem uses may be required as part of the permitting process for implementing the project.

***Local Interested Parties.*** MegaSand is leasing other portions of the island for sand mining and has expressed support for implementing the project. MegaSand has offered use of its Horseshoe Bend docking and landing areas for project activities. The CDFG owns 35 acres at the northern (upstream) end of the island, and has previously expressed support for the project.

The project team has obtained peer review of its planning activities through informal agency consultations and the IEP Resident Species Coordination Team. The project team has also sought the participation of others interested in study activities that could complement the proposed studies. Commitments of interest have been previously received from DWR's MWQI Unit and from graduate students of the UCD Department of Land, Air and Water, as discussed earlier. Coordination with DWR and UCD during the previous CALFED project phase yielded preliminary study proposals that focus on water quality.

In addition to the above parties and agencies, the Corps, USFWS, NMFS, and National Audubon Society have been informed of the project. The Corps has been involved in a wetland delineation of the project site, and the USFWS and NMFS have been consulted on project design, permitting, and scientific collection permits for monitoring activities.

***Public Outreach Plan.*** Public outreach will include both public involvement and public information activities. Public involvement activities will be conducted as part of the environmental regulatory review (CEQA) process and include notices announcing the opportunity for public review and comment on the proposed final design for the habitat enhancements on Decker Island. Public information activities will follow public involvement and consist of preparing and sending newsletters to interested parties. The list will be compiled from past and future project planning activities and will be composed of local landowners, individuals and interest groups who commented on the updated initial study, and permitting and consulting agencies, along with any other interested persons. Newsletters will be sent out after completion of major project milestones. In is anticipated that such milestones include environmental document finalization, project construction and vegetation planting work, and project monitoring. The newsletters will identify and describe project progress, including the results of the two-year monitoring program.

***Property Use/Access.*** Prior to start of the project, a final agreement will have to be reached between CALFED and the Port concerning land rights, as discussed on page 10. Project construction at the site will not be undertaken until the agreement has been executed. MegaSand has offered use of its dock and landing area on Horseshoe Bend for project activities.

***Third Party Effects.*** Initial project analyses have not identified any adverse effects to third parties. MegaSand operations will not be affected by the restoration of the tidal wetland.

## Cost

***Budget.*** Project implementation would be accomplished over approximately 3 years and involve three phases, as identified previously in the Project Description. The anticipated budget is provided in **Table 2. Table 3** provides a quarterly budget breakdown. Total anticipated costs, excluding land rights to the 140-acre project site, would be approximately $379,000.

***Schedule.*** A preliminary schedule of completion dates for key project tasks and milestones is presented below.

| Task | Start/Completion Date |
|---|---|
| Receive CALFED Approval | July 1999 |
| CALFED/Port Reach Land Agreement | July-October 1999 |
| CALFED/Port Execute Land Agreement | October 1999-May 2000 |
| **Phase I: Final Design** | |
| *Finalize Project Design* | October-December 1999 |
| *Obtain Required Permits* | October 1999-May 2000 |
| *Develop Monitoring/Methods Program* | January-March 2000 |
| *CEQA/NEPA Update* | January-May 2000 |
| **Phase II: Project Construction** | |
| *Prepare Construction Bid Specifications* | February-May 2000 |
| *Solicit Construction Bids* | June 2000 |
| *Award Construction Contract* | July 2000 |
| *Perform Habitat Enhancements* | September-October 2000 |
| *Prepare Project Construction Report* | October 2000-January 2001 |
| **Phase III: Project Monitoring** | |
| *Conduct Monitoring Program* | October 2000-October 2002 |
| *Submit 2000-2001 Monitoring Report (Year 1: October 2000-October 2001)* | December 2001 |
| *Submit 2001-2002 Monitoring Report (Year 2: October 2001-October 2002)* | December 2002 |
| *Develop Subsequent Years Monitoring Program* | December 2002 |

| Table 2. Total Budget - Decker Island Tidal Wetland Enhancement Pilot Project | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Task** | **Direct Labor Hours** | **Direct Salary and Benefits** | **Service Contracts** | **Material and Acquisition Costs** | **Miscellaneous and Other Direct Costs** | **Overhead and Other Direct Costs** | **Total Cost** |
| *Pre-Project Land Acquisition* (permanent easement or land purchase) | | | | | To be negotiated | | To be negotiated |
| **Phase I: Final Design** | | | | | | | |
| ***Task 1: Finalize Project Design*** | | | | | | | $13,000 |
| *Subtask 1a: Prepare revised draft design plans* | 46 | $2,400 | $1,400 | | $400 | | $4,200 |
| *Subtask 1b: Hold technical workshop on draft design plans with CALFED and IEP members* | 28 | $1,800 | $800 | | $500 | | $3,100 |
| *Subtask 1c: Finalize project design plans and prepare final design report* | 46 | $2,400 | $1,400 | | $400 | | $4,200 |
| *Subtask 1d: Formalize coordination with other research projects (e.g., DWR, UC Davis)* | 16 | $1,500 | | | | | $1,500 |
| ***Task 2: CEQA/NEPA Update*** | | | | | | | $26,250 |
| *Subtask 2a: Revise and release proposed Initial Study/ Environmental assessment, Negative Declaration and Finding of No Significant Impact* | 184 | $13,200 | $1,600 | | $2,500 | | $17,300 |
| *Subtask 2b: Respond to comments, finalize Negative Declaration and FONSI, and issue notices* | 74 | $5,650 | $800 | | $2,500 | | $8,950 |
| ***Task 3: Develop Monitoring Program*** | | | | | | | $25,800 |
| *Subtask 3a: Prepare draft monitoring methods program* | 204 | $14,400 | $4,400 | | $500 | | $19,300 |

| Table 2. Total Budget - Decker Island Tidal Wetland Enhancement Pilot Project | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Task** | **Direct Labor Hours** | **Direct Salary and Benefits** | **Service Contracts** | **Material and Acquisition Costs** | **Miscellaneous and Other Direct Costs** | **Overhead and Other Direct Costs** | **Total Cost** |
| *Subtask 3b: Review draft monitoring methods program at the CALFED and IEP technical meeting (See Subtask 1b above), and finalize monitoring program* | 64 | $4,400 | $1,600 | | $500 | | $6,500 |
| ***Task 4: Obtain Required Permits*** | | | | | | | $22,700 |
| *Subtask 4a: Obtain scientific collection permit* | 52 | $5,000 | | | | | $5,000 |
| *Subtask 4b: Obtain U.S. Army Corps of Engineers Section 404 permit and complete ESA consultations* | 120 | $11,400 | $800 | | $200 | | $12,400 |
| *Subtask 4c: Obtain Water Quality Certification or exemption (Section 401 of the Clean Water Act)* | 16 | $1,600 | | | | | $1,600 |
| *Subtask 4d: Obtain Streambed Alteration Agreement* | 14 | $1,400 | | | $200 | | $1,600 |
| *Subtask 4e: Obtain Solano County Grading permit* | 16 | $1,600 | | | $500 | | $2,100 |
| **Phase II: Project Construction** | | | | | | | |
| ***Task 1: Prepare Construction Specifications*** | | | | | | | $18,650 |
| *Subtask 1a: Prepare draft construction specifications* | 82 | $1,800 | $5,050 | | $300 | | $7,150 |
| *Subtask 1b: Hold project team meeting to review construction specifications* | 16 | $800 | $800 | | | | $1,600 |
| *Subtask 1c: Finalize construction specifications, issue request for construction bids, and award construction contract* | 118 | $3,200 | $6,700 | | | | $9,900 |

| Table 2. Total Budget - Decker Island Tidal Wetland Enhancement Pilot Project | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Task** | **Direct Labor Hours** | **Direct Salary and Benefits** | **Service Contracts** | **Material and Acquisition Costs** | **Miscellaneous and Other Direct Costs** | **Overhead and Other Direct Costs** | **Total Cost** |
| ***Task 2: Construct Habitat Enhancements*** | | | | | | | $111,900 |
| *Subtask 2a: Excavate feeder channels, construct habitat mounds, and breach riverbank* | | | | | $85,000 | | $85,000 |
| *Subtask 2b: Construction monitoring* | 66 | $800 | $4,550 | | $1,500 | | $6,850 |
| *Subtask 2c: Seed riverbank breach and plant vegetation* | | | | | $7,000 | | $7,000 |
| *Subtask 2d: Implement star thistle and water hyacinth control measures* | | | | | $3,000 | | $3,000 |
| *Subtask 2e: Conduct as-built surveys and prepare project construction report* | 102 | $1,200 | $7,350 | | $1,500 | | $10,050 |
| **Phase III: Project Monitoring** | | | | | | | |
| ***Task 1: Implement Monitoring Program*** | | | | | | | $126,800 |
| *Subtask 1a: Conduct 2-year monitoring program* | 888 | $22,400 | $51,400 | | $25,000 | | $98,800 |
| *Subtask 1b: Prepare annual monitoring reports* | 248 | $10,800 | $10,000 | | $200 | | $21,000 |
| ***Task 2: Develop Subsequent 5-10 Year Monitoring Program*** | 96 | $6,400 | $2,400 | | $200 | | $9,000 |
| **Project Management** | | | | | | | $31,650 |
| *Contract Management* | 200 | $14,000 | | | $1,500 | | $15,500 |
| *Schedule tracking and preparation of quarterly progress reports* | 96 | $7,200 | | | $200 | | $7,400 |
| *Public outreach activities* | 110 | $7,750 | | | $1,100 | | $8,750 |
| ***TOTAL PROJECT COST*** | | | | | | | **$378,750** |

| Table 3. Quarterly Report - Decker Island Tidal Wetland Enhancement Pilot Project | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Task** | **Oct-Dec 1999** | **Jan-Mar 2000** | **Apr-Jun 2000** | **Jul-Sep 2000** | **Oct-Dec 2000** | **Jan-Mar 2001** | **Apr-Jun 2001** | **Jul-Sep 2001** | **Oct-Dec 2001** | **Jan-Mar 2002** | **Apr-June 2002** | **Jul-Sep 2002** | **Oct-Dec 2002** | **Total Budget** |
| *Pre-Project Land Acquisition (permanent easement or land purchase)* | To be negotiated | | | | | | | | | | | | | |
| **Phase I: Final Design** | | | | | | | | | | | | | | |
| ***Task 1: Finalize Project Design*** | | | | | | | | | | | | | | |
| *Subtask 1a: Draft design plan* | $4,200 | | | | | | | | | | | | | $4,200 |
| *Subtask 1b: Draft design plans on technical workshop* | $3,100 | | | | | | | | | | | | | $3,100 |
| *Subtask 1c: Finalize project design plans/ final design report* | $4,200 | | | | | | | | | | | | | $4,200 |
| *Subtask 1d: Coordinate with other research projects* | | $1,500 | | | | | | | | | | | | $1,500 |
| ***Task 2: CEQA/NEPA Update*** | | | | | | | | | | | | | | |
| *Subtask 2a: Revise CEQA/NEPA documents* | | $17,300 | | | | | | | | | | | | $17,300 |
| *Subtask 2b: Complete CEQA/NEPA compliance* | | | $8,950 | | | | | | | | | | | $8,950 |
| ***Task 3: Develop Monitoring Program*** | | | | | | | | | | | | | | |
| *Subtask 3a: Draft monitoring/methods program* | | $19,300 | | | | | | | | | | | | $19,300 |



I-014503

| Table 3. Quarterly Report - Decker Island Tidal Wetland Enhancement Pilot Project | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Task** | **Oct-Dec 1999** | **Jan-Mar 2000** | **Apr-Jun 2000** | **Jul-Sep 2000** | **Oct-Dec 2000** | **Jan-Mar 2001** | **Apr-Jun 2001** | **Jul-Sep 2001** | **Oct-Dec 2001** | **Jan-Mar 2002** | **Apr-June 2002** | **Jul-Sep 2002** | **Oct-Dec 2002** | **Total Budget** |
| *Subtask 3b: Draft monitoring/methods program technical meeting and finalization* | | $6,500 | | | | | | | | | | | | $6,500 |
| ***Task 4: Obtain Required Permits*** | | | | | | | | | | | | | | |
| *Subtask 4a: Scientific collection permit* | $2,000 | $1,000 | $2,000 | | | | | | | | | | | $5,000 |
| *Subtask 4b: Section 404 permit and ESA consultations* | | $6,000 | $6,400 | | | | | | | | | | | $12,400 |
| *Subtask 4c: Water Quality Certification or exemption* | | $600 | $1,000 | | | | | | | | | | | $1,600 |
| *Subtask 4d: Streambed Alteration Agreement* | | $600 | $1,000 | | | | | | | | | | | $1,600 |
| *Subtask 4e: Solano County grading permit* | | $2,100 | | | | | | | | | | | | $2,100 |
| **Phase II: Project Construction** | | | | | | | | | | | | | | |
| ***Task 1: Prepare Construction Specifications*** | | | | | | | | | | | | | | |
| *Subtask 1a: Draft construction specifications* | | $4,150 | $3,000 | | | | | | | | | | | $7,150 |
| *Subtask 1b: Project Team review of specifications* | | | $1,600 | | | | | | | | | | | $1,600 |
| *Subtask 1c: Finalize specifications, issue request for bids, and award contract* | | | $4,000 | $5,900 | | | | | | | | | | $9,900 |



I-014504

| Table 3. Quarterly Report - Decker Island Tidal Wetland Enhancement Pilot Project | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Task** | **Oct-Dec 1999** | **Jan-Mar 2000** | **Apr-Jun 2000** | **Jul-Sep 2000** | **Oct-Dec 2000** | **Jan-Mar 2001** | **Apr-Jun 2001** | **Jul-Sep 2001** | **Oct-Dec 2001** | **Jan-Mar 2002** | **Apr-June 2002** | **Jul-Sep 2002** | **Oct-Dec 2002** | **Total Budget** |
| ***Task 2: Construct Habitat Enhancements*** | | | | | | | | | | | | | | |
| *Subtask 2a: Excavate feeder channels, construct habitat mounds, and breach riverbank* | | | | | $85,000 | | | | | | | | | $85,000 |
| *Subtask 2b: Construction monitoring* | | | | | $6,850 | | | | | | | | | $6,850 |
| *Subtask 2c: Seed riverbank breach and plant vegetation* | | | | | $7,000 | | | | | | | | | $7,000 |
| *Subtask 2d: Implement star thistle and water hyacinth control measures* | | | | | $3,000 | | | | | | | | | $3,000 |
| *Subtask 2e: Conduct as-built surveys and prepare project construction report* | | | | | $4,500 | $5,550 | | | | | | | | $10,050 |
| **Phase III: Project Monitoring** | | | | | | | | | | | | | | |
| ***Task 1: Implement Monitoring Program*** | | | | | | | | | | | | | | |
| *Subtask 1a: Conduct monitoring program* | | | | | $12,350 | $12,350 | $12,350 | $12,350 | $12,350 | $12,350 | $12,350 | $12,350 | | $98,800 |
| *Subtask 1b: Annual monitoring reports* | | | | | | | | | $10,500 | | | | $10,500 | $21,000 |
| ***Task 2: Develop Subsequent 5-10 Year Monitoring Program*** | | | | | | | | | | | | | $9,000 | $9,000 |
| **Project Management** | | | | | | | | | | | | | | |
| *Contract management* | $2,000 | $2,000 | $2,000 | $2,000 | $2,000 | $250 | $250 | $250 | $1,500 | $250 | $250 | $750 | $2,000 | $15,500 |

| Table 3. Quarterly Report - Decker Island Tidal Wetland Enhancement Pilot Project | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Task** | **Oct-Dec 1999** | **Jan-Mar 2000** | **Apr-Jun 2000** | **Jul-Sep 2000** | **Oct-Dec 2000** | **Jan-Mar 2001** | **Apr-Jun 2001** | **Jul-Sep 2001** | **Oct-Dec 2001** | **Jan-Mar 2002** | **Apr-June 2002** | **Jul-Sep 2002** | **Oct-Dec 2002** | **Total Budget** |
| *Schedule tracking and quarterly progress reports* | $600 | $600 | $500 | $500 | $700 | $500 | $500 | $500 | $700 | $500 | $500 | $600 | $700 | $7,400 |
| *Public outreach activities* | | | $2,000 | | $3,000 | | | | $2,000 | | | | $1,750 | $8,750 |
| ***TOTAL*** | $16,100 | $61,650 | $32,450 | $8,400 | $124,400 | $18,650 | $13,100 | $13,100 | $27,050 | $13,100 | $13,100 | $13,700 | $23,950 | $378,750 |

## Cost Sharing

The project would be funded entirely by CALFED.

***Project Team.*** The project team responsible for planning, designing, and implementing the project includes Surface Water Resources, Inc., Hanson Environmental, Inc., and Laugenour and Meikle. The technical responsibilities of the project team include the following:

- Permitting, project management, and assisting with habitat improvement design and monitoring (SWRI);
- Project design, endangered species consultations, monitoring design, and post-construction monitoring (HEI); and
- Engineering design, construction monitoring, and as-built surveys (L&M).

***Individual Responsibilities and Qualifications.***

**Figure 6** shows the proposed project organization and team members responsible for the identified tasks.

*David Schuster - Principal-in-Charge (SWRI).* Mr. Schuster has participated in the development of much of the significant water policy in California in recent years, including the historic Bay/Delta Accord that brought federal, state, environmental, agricultural, municipal, and industrial interests to agreement on water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. Mr. Schuster was formerly the Assistant Regional Director for the Mid-Pacific Region of the U.S. Bureau of Reclamation, and General Manager for the State Water Contractors.

*Rick Lind - Project Manager (SWRI)* - Mr. Lind will serve as the project manager on this project, as well as coordinate construction planning and permitting. He is a senior project manager whose expertise is in California and federal environmental regulatory compliance and agency/public consultation for water and energy-related project development, programs, and permitting. Mr. Lind was the project manager for the previous Decker Island Pilot Project, including the design of targeted fisheries, waterfowl, upland, and riparian habitat improvements.

*Paul Bratovich - Senior Fisheries Biologist (SWRI)* - Mr. Bratovich will be responsible for aquatic habitat restoration design. Mr. Bratovich has worked as a fisheries consultant and water resources specialist in California for the past 15 years. Mr. Bratovich has conducted analyses on numerous listed, proposed listed, and other special-status aquatic species as part of incidental take permit processes, habitat conservation plans, and watershed management plans. His experience includes regulatory and technical consultations with the CDFG, NMFS, USFWS, and other agencies concerning habitat restoration, endangered species, flow-habitat relationships, population dynamics, and strategic water planning.

*Charles Hanson, Ph.D. - Senior Fisheries Biologist (HEI)* - Dr. Hanson will be in charge of aquatic monitoring design and post-construction monitoring activities. Dr. Hanson has more than 25 years of experience in freshwater and marine biological studies. He has contributed to the study, design, analysis, and interpretation of fisheries, stream habitat, and stream flow data collected in the evaluation of instream flow requirements and potential fishery impacts on salmonid spawning, production, and migration success. Dr. Hanson has been extensively involved in incidental take monitoring and investigations of endangered species, development of recovery plans, consultations, and preparation of aquatic habitat conservation plans.

*Rich Jenness - Professional and Registered Engineer (L & M)* - Mr. Jenness will be responsible for engineering design and construction monitoring. Mr. Jenness serves as district engineer for reclamation and irrigation districts, community service districts, and assessment districts in the Sacramento Valley.

His expertise includes project planning, engineering, and management for a wide range of agricultural, commercial, industrial, and municipal projects, including levees, wastewater and water systems, drainage, streets, roads, and related infrastructure.

*Michael Bryan, Ph.D. - Senior Scientist (SWRI)* - Dr. Bryan will work closely with Dr. Hanson on aquatic monitoring design and Mr. Bratovich on aquatic habitat restoration design. Dr. Bryan has 12 years of combined research and consulting experience. His expertise includes fisheries biology and aquatic ecology, water quality, experimental design, and ecological risk assessment. He has extensive experience conducting fishery studies and assessing the effects of water quality on fish and other aquatic organisms. Dr. Bryan has experience in assessing impacts to aquatic life at the biochemical, cellular, organismal, population, and community levels. Dr. Bryan's experience includes technical and regulatory consultations with CDFG, NMFS, USFWS, and other agencies concerning habitat restoration enhancement, flow habitat relationships, CEQA/NEPA documentation, and NPDES permitting and compliance.

*Dennis Hood - Aquatic Biologist (HEI)* - Dennis hood will perform the majority of aquatic monitoring. Mr. Hood has worked as a fish and wildlife biologist for the past 10 years, with experience in fisheries and aquatic ecology, wildlife biology, and threatened and endangered species management. He has supervised and participated in several aquatic and terrestrial field investigations including fish community surveys, benthic community surveys, field surveys involving state and federally listed species, habitat characterization and delineation, and water quality assessments. He has also been involved in fish and wildlife impact analysis and in developing, implementing, and monitoring mitigation measures on several projects.

*Steve James - Biologist (SWRI)* - Steve James will be responsible for terrestrial habitat design, monitoring, and permitting issues. Mr. James' expertise is in California and federal ESA consultation and compliance, habitat conservation planning, mitigation monitoring, and wetland and vernal pool habitat studies. He has served as technical team leader in the preparation and analysis of coastal riparian and freshwater marsh restoration projects. He has also designed biological mitigation programs for riparian habitat in agricultural areas.

***Potential Conflicts of Interest.*** There are no known conflicts of interest.

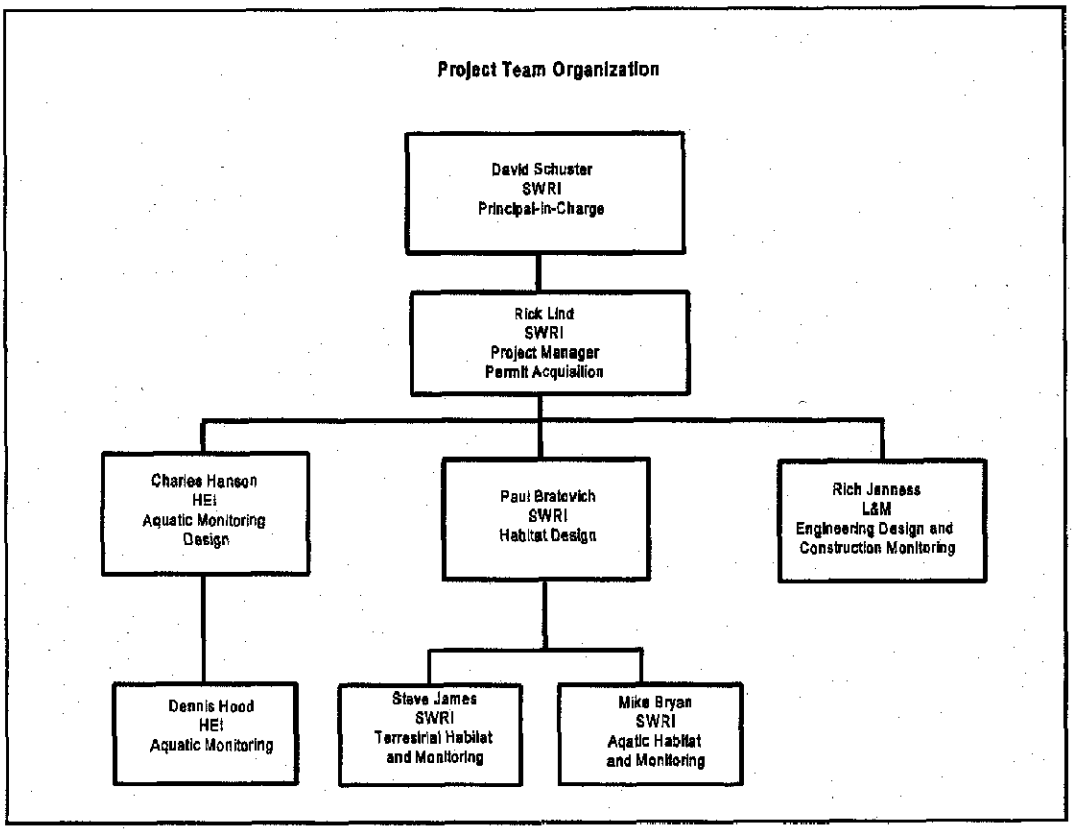
Project Team Organization
David Schuster
SWRI
Principal-in-Charge
Rick Lind
SWRI
Project Manager
Permit Acquisition
Charles Hanson
HEI
Aquatic Monitoring
Design
Paul Bratovich
SWRI
Habitat Design
Rich Janness
L&M
Engineering Design and
Construction Monitoring
Dennis Hood
HEI
Aquatic Monitoring
Steve James
SWRI
Terrestrial Habitat
and Monitoring
Mike Bryan
SWRI
Aqatic Habitat
and Monitoring

**Figure 6**

# Appendix A

# Local Involvement and Support Letters

*Solano County Department of Environmental Management*

*MegaSand*

*Delta Protection Commission*

SWRI SURFACE WATER RESOURCES, INC.

April 5, 1999

Mr. Brian Parker
Principal Planner
Solano County Department of Environmental Management
Planning Division
601 Texas Street
Fairfield, CA 94533

Subject: Proposal to CALFED to Implement Decker Island Tidal Wetland Enhancement Pilot Project

Dear Mr. Parker:

This letter follows our telephone conversation of April 2, 1999, and my conversation with Matt Walsh on March 30, 1999. Surface Water Resources, Inc. (SWRI) plans to submit a proposal to CALFED for the subject project. The project would implement plans developed by the Port of Sacramento (Port) through an earlier CALFED project on which your agency was consulted in 1997.

The Decker Island Tidal Wetland Enhancement Pilot Project would involve the restoration and monitoring of a tidal wetland on the Port's 140-acre portion of Decker Island. Decker Island is bordered on the east by Horseshoe Bend of the original Sacramento River channel and on the west by the Deepwater Ship Channel, near the town of Rio Vista. **Figure 1** is a regional map showing the location of Decker Island.

We understand that the Solano County Department of Environmental Management may require approval for modifying the land use at the project site. The need for such approval would depend upon final arrangements for land rights (e.g., permanent easement versus title transfer to another public agency). As currently envisioned, an agreement for land rights would be finalized before the project could be implemented. It is anticipated that land rights would be finalized in 1999 with project implementation in late 1999 or early 2000. SWRI would work with your agency to identify and then obtain necessary approvals.

The objectives of the Decker Island Tidal Wetland Enhancement Pilot Project are to:

- Create self-sustaining tidally influenced wetland habitat that directly benefits special-status aquatic species (e.g., delta smelt, Sacramento splittail, all runs of chinook salmon, and steelhead), and indirectly benefits riparian and terrestrial species in an area (between Browns Island and Cache Slough/Prospect Island) where such resources are limited.
- Structure the enhancements and monitoring program as a pilot project that provides fish species habitat use, ecosystem development, and fish monitoring knowledge that directly benefits ongoing planning efforts for future larger-scale Delta restoration plans.

455 Capitol Mall • Suite 600 • Sacramento, California 95814
Tel: (916) 325-4050 • FAX: (916) 446-0143 • E-mail: swri@ix.netcom.com

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I-014512

SWRI SURFACE WATER RESOURCES, INC.

The proposed aquatic and terrestrial habitat improvements will be accomplished by exposing up to approximately 100 acres to tidal flows (higher-high tide level) and by planting vegetation in selected areas to promote riparian and upland revegetation of the project site. The parcel has been used most recently for grazing, and historically for growing grain.

Tidal flow design includes construction of a riverbank breach and two tidal feeder channels into the interior of the island. Terrestrial habitat plantings will occur in two areas—on the riverbank and on habitat mounds designed to provide habitat diversity within the newly created tidal wetland. In addition, treatment is proposed to accelerate natural revegetation and elimination of star thistle on the upland portion of the project site. **Figure 2** shows the overall project design relative to the 140-acre site.

The project team responsible for implementing the project would include SWRI, Hanson Environmental, Inc. (HEI), and Laugenour and Meikle (L&M). SWRI would likely be responsible for project management.

We will provide you with a copy of the proposal when it is submitted to CALFED. We look forward to continuing to work with your agency on this project. Please feel free to contact me at (916) 325-4042 with any questions.

Sincerely,

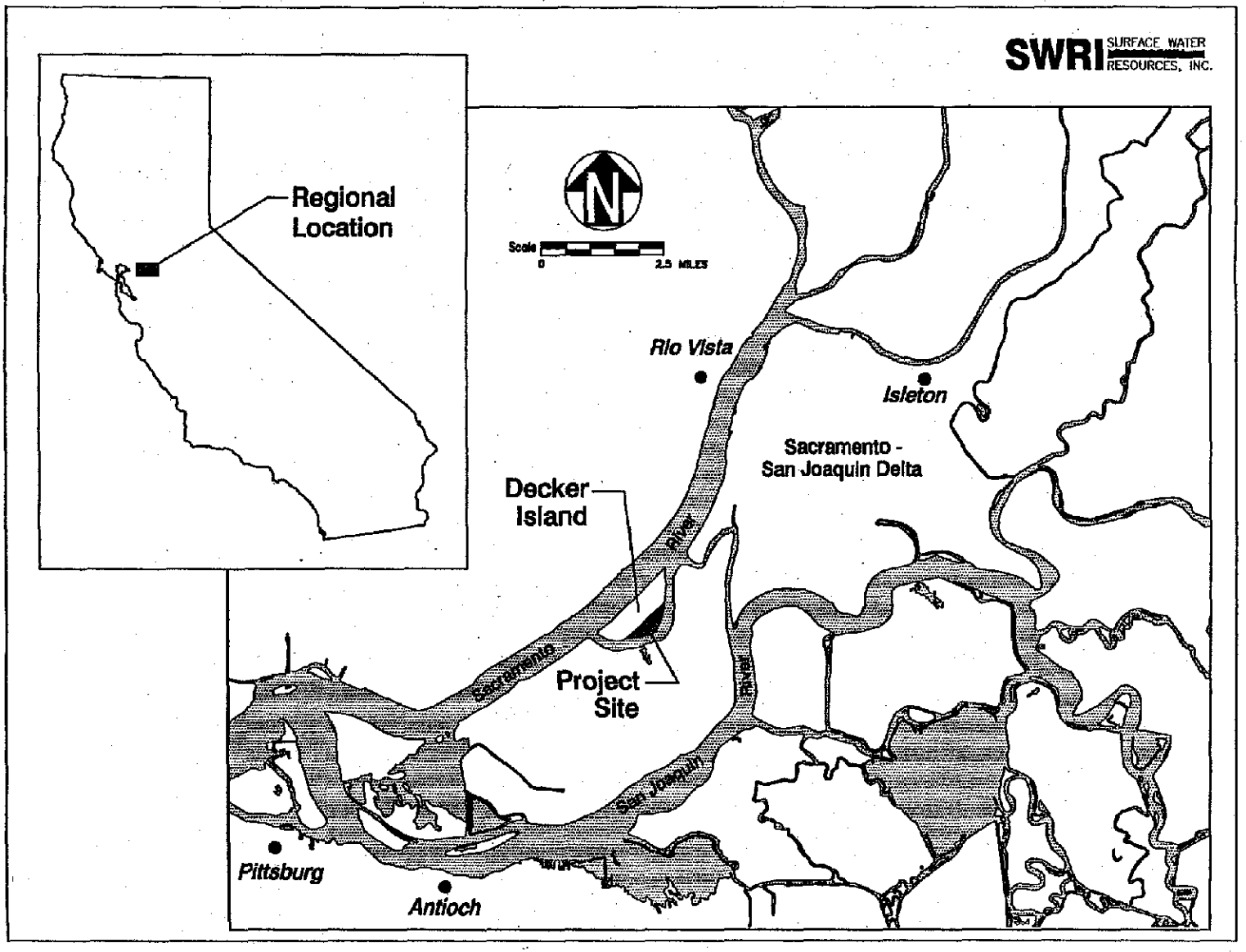
Rick Lind
Senior Project Manager

Enclosure

cc: John Sulpizio, Director
Port of Sacramento

Solano County Board of Supervisors

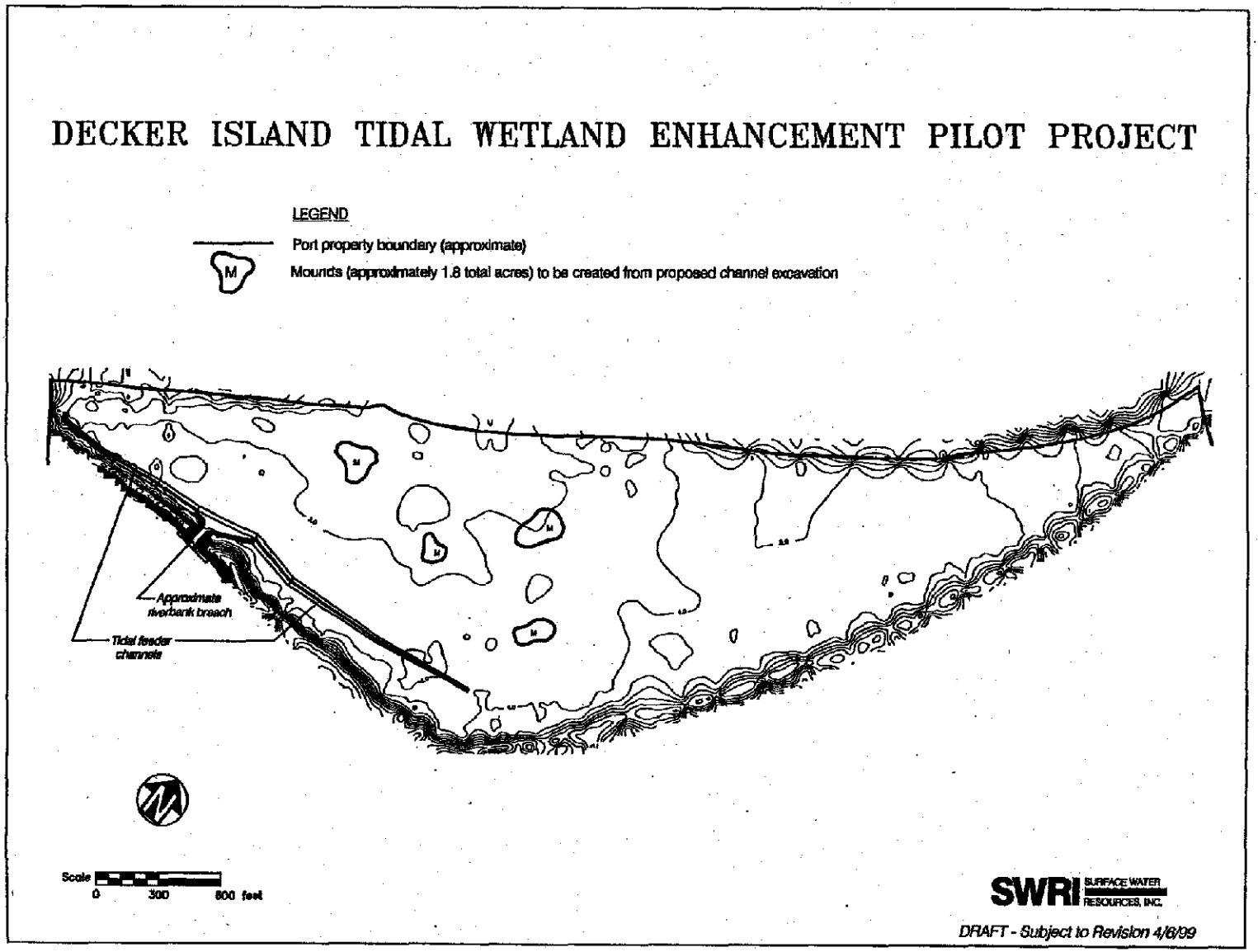
Figure 1 - Regional Location and Project Area




I—014514

I-014514

Figure 2






I-014515

SWRI SURFACE WATER RESOURCES, INC.

April 6, 1999

Mr. Richard Block
MegaSand
P.O. Box 397
Antioch, CA 94509

Subject: Proposal to CALFED to Implement Decker Island Tidal Wetland Enhancement Pilot Project

Dear Mr. Block;

This letter follows our telephone conversation of April 2, 1999. Surface Water Resources, Inc. (SWRI) plans to submit a proposal to CALFED for the subject project. The project would implement plans developed by the Port of Sacramento (Port) through an earlier CALFED project on which MegaSound was consulted in 1997.

You have previously assisted us with the Decker Island project through consultations and use of MegaSand's dock and loading area adjacent to the Port property on Horseshoe Bend. We understand that MegaSand continues to offer this support as part of the currently proposed implementation phase of the project.

The Decker Island Tidal Wetland Enhancement Pilot Project would involve the restoration and monitoring of a tidal wetland on the Port's 140-acre portion of Decker Island. **Figure 1** is a regional map showing the project location.

The objectives of the Decker Island Tidal Wetland Enhancement Pilot Project are to:

- Create self-sustaining tidally influenced wetland habitat that directly benefits special-status aquatic species (e.g., delta smelt, Sacramento splittail, all runs of chinook salmon, and steelhead), and indirectly benefits riparian and terrestrial species in an area (between Browns Island and Cache Slough/Prospect Island) where such resources are limited.
- Structure the enhancements and monitoring program as a pilot project that provides fish species habitat use, ecosystem development, and fish monitoring knowledge that directly benefits ongoing planning efforts for future larger-scale Delta restoration plans.

Tidal flow design includes construction of a riverbank breach and two tidal feeder channels into the interior of the island. Terrestrial habitat plantings will occur in two areas—on the riverbank and on habitat mounds designed to provide habitat diversity within the newly created tidal wetland. In addition, treatment is proposed to accelerate natural revegetation and elimination of star thistle on the upland portion of the project site. **Figure 2** shows the overall project design relative to the 140-acre site.

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SWRI SURFACE WATER RESOURCES, INC.

We will provide you with a copy of the proposal when it is submitted to CALFED. We look forward to continuing to work with your organization on this project. Please feel free to contact me at (916) 325-4042 with any questions.

Sincerely,

Rick Lind
Senior Project Manager

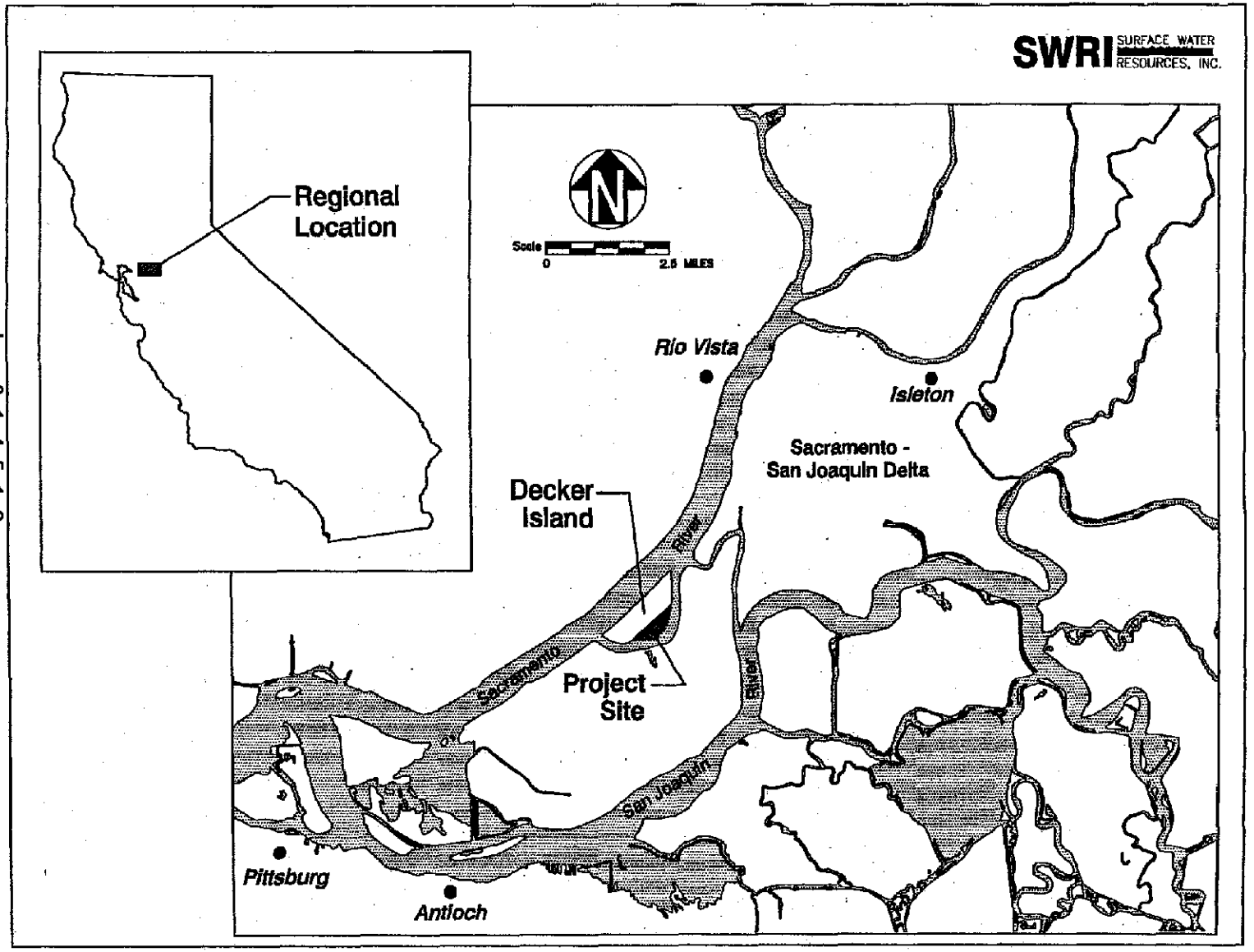
Enclosure

cc: John Sulpizio, Director
Port of Sacramento



I-014517

Figure 1 - Regional Location and Project Area

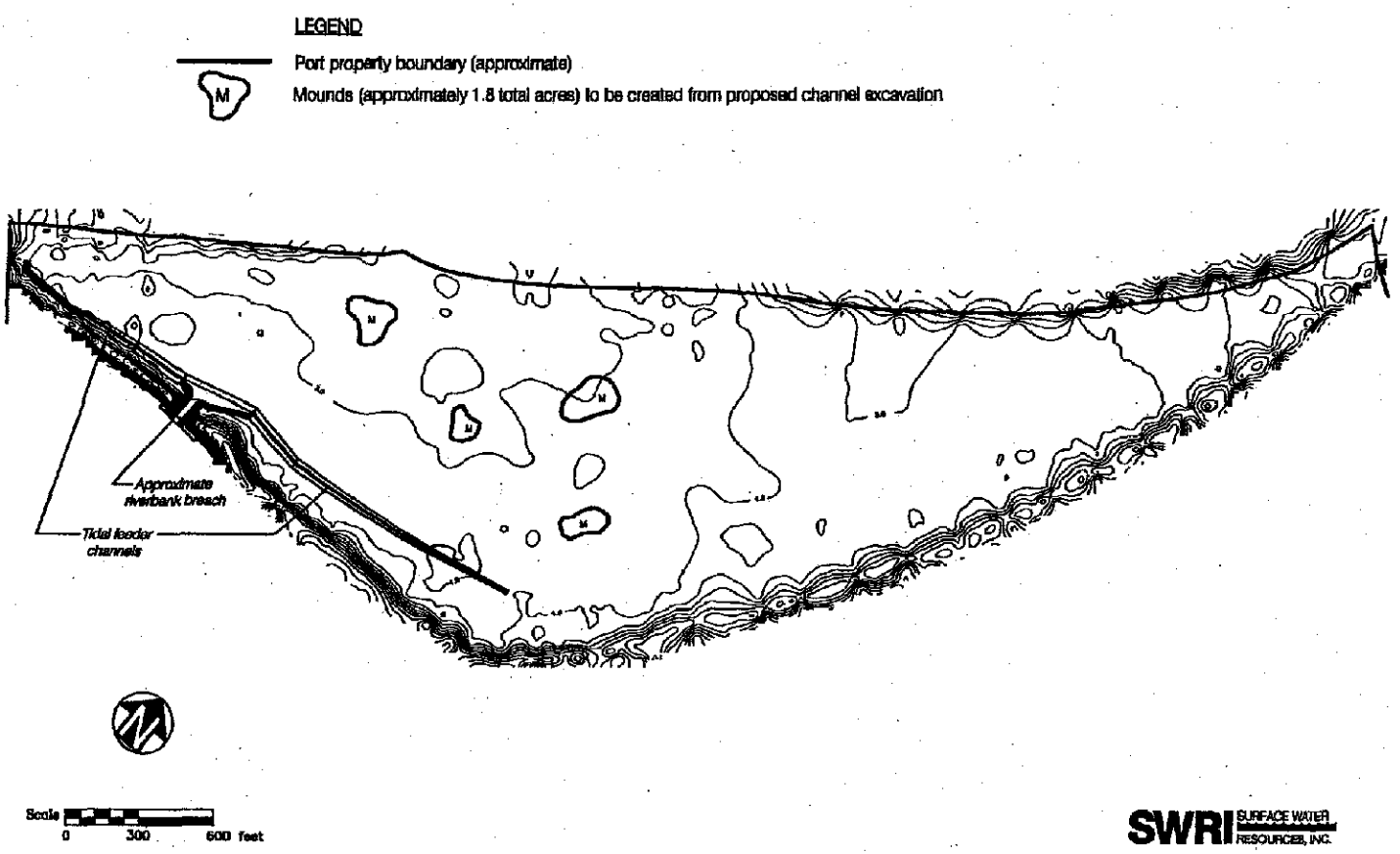



I—014518

I-014518

Figure 2

# DECKER ISLAND TIDAL WETLAND ENHANCEMENT PILOT PROJECT




I—014519

I-014519

SWRI SURFACE WATER RESOURCES, INC.

April 14, 1999

Delta Protection Commission
14215 River Road
Walnut Grove, CA 95690

Subject: Proposal to CALFED to Implement Decker Island Tidal Wetland Enhancement Pilot Project

Dear Commission Members:

This letter is to inform the Delta Protection Commission of a proposal that is being submitted to CALFED by Surface Water Resources, Inc. (SWRI) involving restoration of a tidal wetland on Decker Island. The Decker Island Tidal Wetland Enhancement Pilot Project would involve the restoration and monitoring of a tidal wetland on a 140-acre portion of Decker Island. Decker Island is located within the Sacramento-San Joaquin Delta, near the town of Rio Vista. It is bordered on the east by Horseshoe Bend of the original Sacramento River channel and on the west by the Deepwater Ship Channel. **Figure 1** is a regional map showing the location of Decker Island.

The objectives of the Decker Island Tidal Wetland Enhancement Pilot Project are to:

- Create self-sustaining tidally influenced wetland habitat that directly benefits special-status aquatic species (e.g., delta smelt, Sacramento splittail, all runs of chinook salmon, and steelhead), and indirectly benefits riparian and terrestrial species in an area (between Browns Island and Cache Slough/Prospect Island) where such resources are limited.
- Structure the enhancements and monitoring program as a pilot project that provides species habitat use, ecosystem development, and fish monitoring knowledge that directly benefits ongoing planning efforts for future larger-scale Delta restoration plans.

The proposed Decker Island aquatic and terrestrial habitat improvements will be accomplished by exposing up to approximately 100 acres (higher-high tide level) to tidal flows and by planting vegetation to promote riparian and upland revegetation of the project site. Tidal flow design includes construction of a riverbank breach and two tidal feeder channels into the interior of the island. Terrestrial habitat plantings will occur in two areas—on the riverbank and on habitat mounds designed to provide habitat diversity within the newly created tidal wetland. In addition, treatment is proposed to accelerate natural revegetation and elimination of star thistle on the upland portion of the project site. **Figure 2** shows the overall project design relative to the 140-acre site.

The project team responsible for planning, designing, and implementing the project includes Surface Water Resources, Inc. (SWRI), Hanson Environmental, Inc. (HEI), and Laugenour and Meikle (L&M). SWRI will be serving as the lead company in the proposal and will be responsible

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Tel: (916) 325-4050 • FAX: (916) 446-0143 • E-mail: swri@ix.netcom.com

SWRI SURFACE WATER RESOURCES, INC.

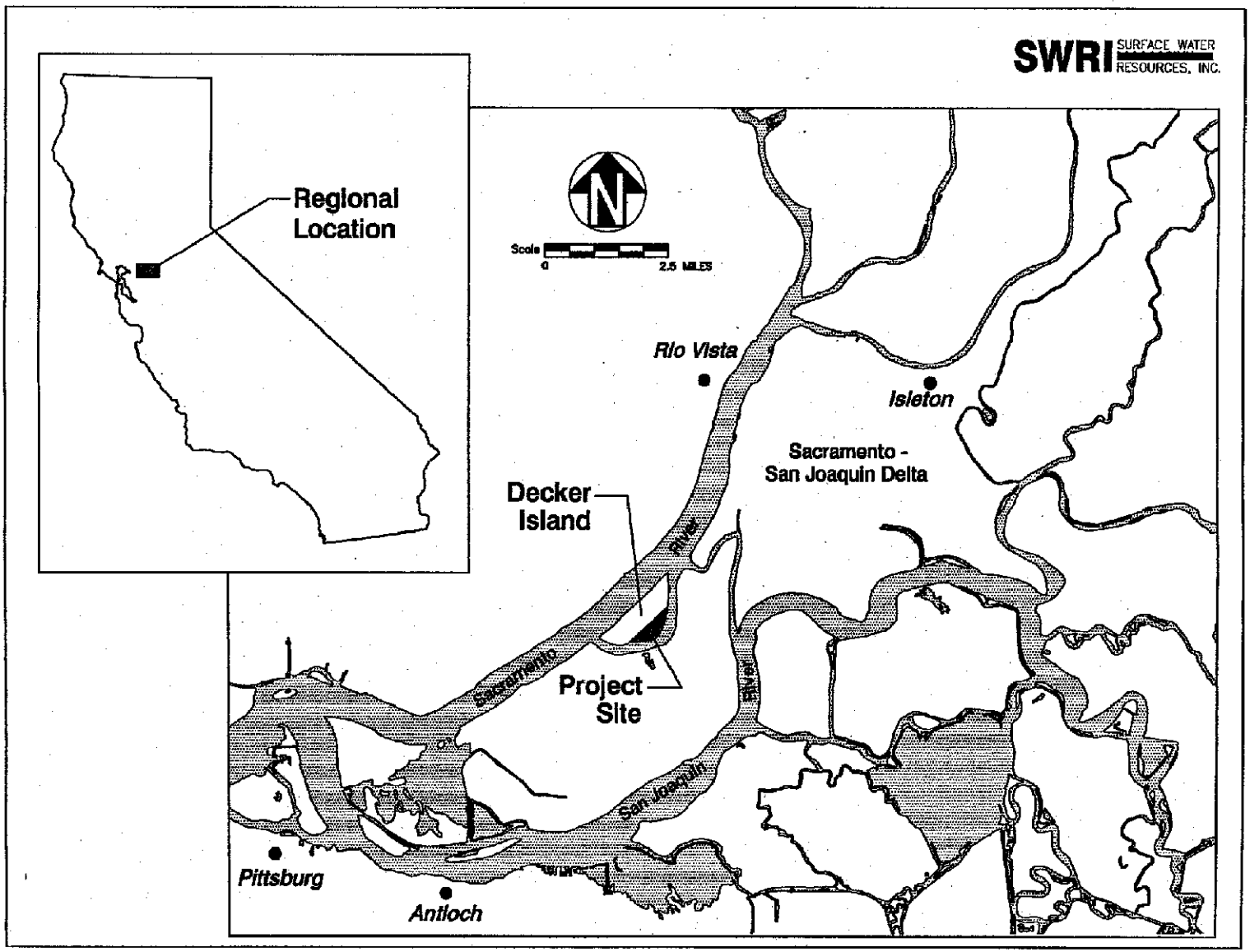
for project management. Please feel free to contact me with any questions or comments regarding the proposed Decker Island project.

Sincerely,

SURFACE WATER RESOURCES, INC.

David R. Schuster
Partner

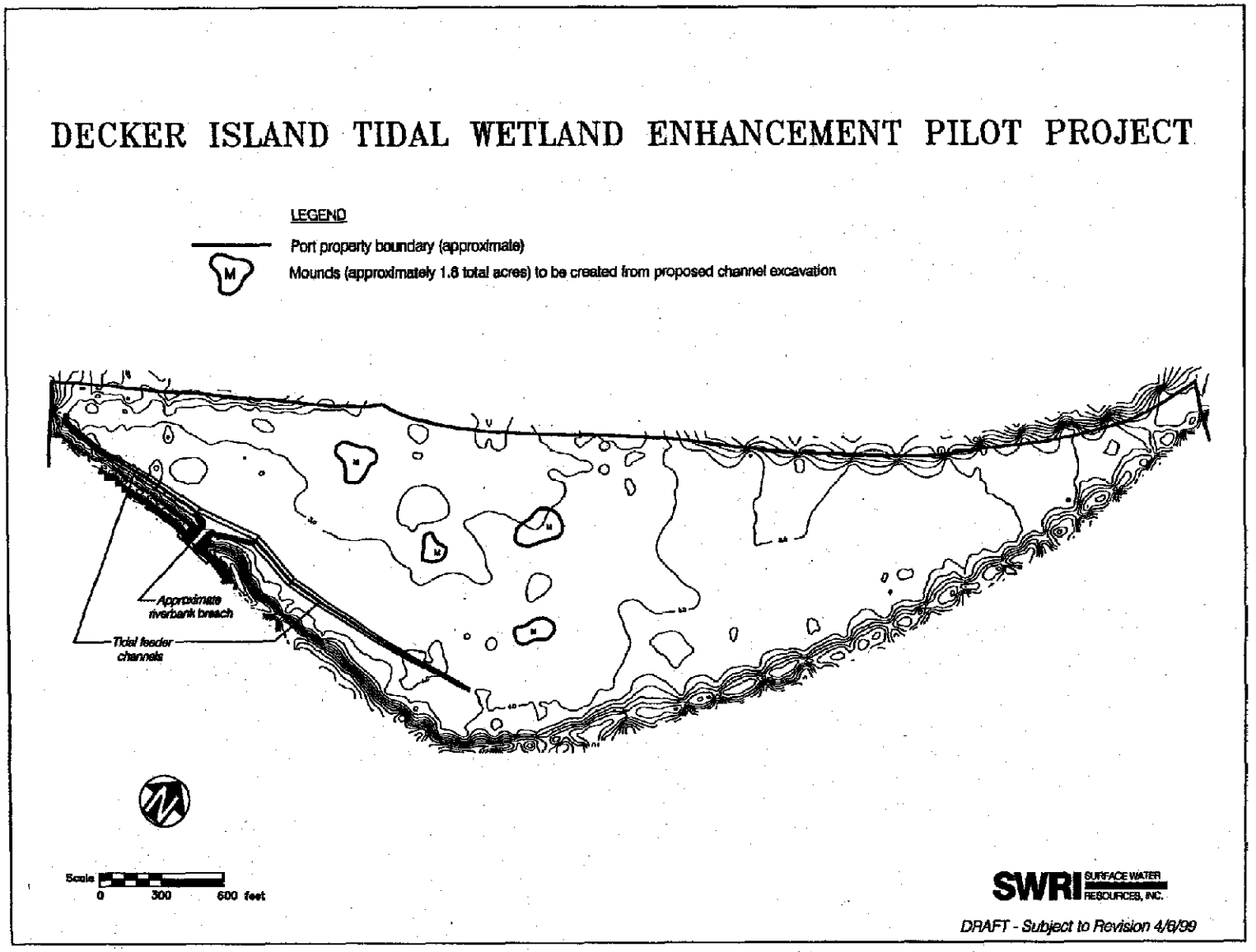
Figure 1 - Regional Location and Project Area




I-014522

I-014522

**Figure 2**






I-014523

# Appendix B

# Required State and Federal Forms

*Nondiscrimination Compliance Statement*

*Standard Form 424 - Application for Federal Assistance*

*Standard Form 424C Budget Information*

*Standard Form 424D Assurances Construction Programs*

*Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying*

STATE OF CALIFORNIA

# NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95) FMC

COMPANY NAME: Surface Water Resources, Inc.

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

## CERTIFICATION

*I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.*

OFFICIAL'S NAME: David R. Schuster

DATE EXECUTED: 4-16-99

EXECUTED IN THE COUNTY OF: Sacramento

PROSPECTIVE CONTRACTOR'S SIGNATURE:

PROSPECTIVE CONTRACTOR'S TITLE: Partner

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME: Surface Water Resources, Inc.

I -014525

I-014525

# APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

| 2. DATE SUBMITTED | Applicant Identifier |
|---|---|
| 4/16/99 | |
| **3. DATE RECEIVED BY STATE** | **State Application Identifier** |
| **4. DATE RECEIVED BY FEDERAL AGENCY** | **Federal Identifier** |

**1. TYPE OF SUBMISSION:**

| Application | Preapplication |
|---|---|
| [X] Construction | [ ] Construction |
| [ ] Non-Construction | [ ] Non-Construction |

**5. APPLICANT INFORMATION**

Legal Name: Surface Water Resources, Inc.

Organizational Unit:

Address (give city, county, State, and zip code): 455 Capitol Mall, Suite 600 Sacramento, CA 95814

Name and telephone number of person to be contacted on matters involving this application (give area code): David R. Schuster 916/325-4050

**6. EMPLOYER IDENTIFICATION NUMBER (EIN):** 68-0384309

**7. TYPE OF APPLICANT:** (enter appropriate letter in box) M

A. State — H. Independent School Dist.
B. County — I. State Controlled Institution of Higher Learning
C. Municipal — J. Private University
D. Township — K. Indian Tribe
E. Interstate — L. Individual
F. Intermunicipal — M. Profit Organization
G. Special District — N. Other (Specify) _____

**8. TYPE OF APPLICATION:**

[X] New [ ] Continuation [ ] Revision

If Revision, enter appropriate letter(s) in box(es) [ ] [ ]

A. Increase Award B. Decrease Award C. Increase Duration
D. Decrease Duration Other (specify):

_____

**9. NAME OF FEDERAL AGENCY:** CALFED

**10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:** N/A

TITLE:

**11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:** Proposal to Implement Decker Island Tidal Wetland Enhancement Pilot Project

**12. AREAS AFFECTED BY PROJECT** (Cities, Counties, States, etc.): Solano County

| 13. PROPOSED PROJECT | | 14. CONGRESSIONAL DISTRICTS OF: | |
|---|---|---|---|
| Start Date | Ending Date | a. Applicant | b. Project |
| 7/99 | 1/03 | 3-5, 11 | 1, 3, 7 |

**15. ESTIMATED FUNDING:**

| | |
|---|---|
| a. Federal | $ .00 |
| b. Applicant | $ .00 |
| c. State | $ .00 |
| d. Local | $ .00 |
| e. Other | $ .00 |
| f. Program Income | $ .00 |
| g. TOTAL | $ 379,000 .00 |

**16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?** N/A

a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:

DATE _____

b. No. [ ] PROGRAM IS NOT COVERED BY E. O. 12372
[ ] OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

**17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?**

[ ] Yes If "Yes," attach an explanation. [X] No

**18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.**

| a. Type Name of Authorized Representative | b. Title | c. Telephone Number |
|---|---|---|
| David R. Schuster | Partner | 916/325-4050 |
| d. Signature of Authorized Representative | | e. Date Signed |
| | | 4/16-99 |

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Authorized for Local Reproduction

Standard Form 424 (Rev. 7-97)
Prescribed by OMB Circular A-102

I -014526

I-014526

## INSTRUCTIONS FOR THE SF-424



**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

| Item: | Entry: |
|---|---|
| 1. | Self-explanatory. |
| 2. | Date application submitted to Federal agency (or State if applicable) and applicant's control number (if applicable). |
| 3. | State use only (if applicable). |
| 4. | If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank. |
| 5. | Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application. |
| 6. | Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service. |
| 7. | Enter the appropriate letter in the space provided. |
| 8. | Check appropriate box and enter appropriate letter(s) in the space(s) provided:<br>-- "New" means a new assistance award.<br>-- "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date.<br>-- "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation. |
| 9. | Name of Federal agency from which assistance is being requested with this application. |
| 10. | Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested. |
| 11. | Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project. |
| 12. | List only the largest political entities affected (e.g., State, counties, cities). |
| 13. | Self-explanatory. |
| 14. | List the applicant's Congressional District and any District(s) affected by the program or project. |
| 15. | Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate *only* the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15. |
| 16. | Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process. |
| 17. | This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans and taxes. |
| 18. | To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.) |

[redacted]

* To be negotiated.

OMB Approval No. 0348-0041

## BUDGET INFORMATION -- Construction Programs

*NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case you will be notified.*

| | COST CLASSIFICATION | a. Total Cost | b. Costs Not Allowable for Participation | c. Total Allowable Costs (Column a-b) |
|---|---|---|---|---|
| 1. | Administrative and legal expenses | $ 31,650 | $ | $ 31,450 |
| 2. | Land, structures, rights-of-way, appraisals, etc. | $ * | $ | $ |
| 3. | Relocation expenses and payments | $ | $ | $ |
| 4. | Architectural and engineering fees | $ 235,200 | $ | $ 235,200 |
| 5. | Other architectural and engineering fees | $ | $ | $ |
| 6. | Project Inspection fees | $ | $ | $ |
| 7. | Site work | $ | $ | $ |
| 8. | Demolition and removal | $ | $ | $ |
| 9. | Construction | $ 111,900 | $ | $ 111,900 |
| 10. | Equipment | $ | $ | $ |
| 11. | Miscellaneous | $ | $ | $ |
| 12. | SUBTOTAL | $ | $ | $ |
| 13. | Contingencies | $ | $ | $ |
| 14. | SUBTOTAL | $ | $ | $ |
| 15. | Project (program) income | $ | $ | $ |
| 16. | TOTAL PROJECT COSTS (subtract #15 from #14) | $ 378,750 | $ | $ 378,750 |
| | | | | |
| 17. | Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share). Enter the resulting Federal share. | Enter eligible costs from line 16c Multiply X 100 % | | $ 378,750 |

Previous Edition Usable

Standard Form 424C (Rev. 4-88)

I-014528

I-014528

# INSTRUCTIONS FOR THE SF 424C



This sheet is to be used for the following types of applications: (1) "New" (means a new [previous unfunded] assistance award); (2) "Continuation" (means funding in a succeeding budget period which stemmed from a prior agreement to fund); and (3) "Revised" (means any changes in the Federal government's financial obligations or contingent liability from an existing obligation). If there is no change in the award amount there is no need to complete this form. Certain Federal agencies may require only an explanatory letter to the effect minor (no cost) changes. If you have questions please contact the Federal agency.

*Column* a.--If this is an application for a "New" project, enter the total estimated cost of each of the items listed on lines 1 through 16 (as applicable) under "COST CLASSIFICATIONS."

If this application entails a change to an existing award, enter the eligible amounts *approved under the previous award* for the items under "COST CLASSIFICATION."

*Column* b.--If this is an application for a "New" project, enter that portion of the cost of each item in Column a, which is *not* allowable for Federal assistance in determining the allowability of specific costs.

If this application entails a change to an existing award, enter the adjustment [ + or (-)] to the previously approved costs (from column a.) reflected in this application.

*Column* c.--This is the net of lines 1 through 16 in columns "a." and "b."

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Line 1--Enter estimated amounts needed to cover administrative expenses. Do not include costs which are related to the normal functions of government. Allowable legal costs are generally only those associated with the purchase of land which is allowable for Federal participation and certain services in support of construction of the project.

Line 2--Enter estimated site and right(s)-of-way acquisition costs (this includes purchase, lease, and/or easements).

Line 3--Enter estimated costs related to relocation advisory assistance, replacement housing, relocation payments to displaced persons and businesses, etc.

Line 4--Enter estimated basic engineering fees related to construction (this includes start-up services and preparation of project performance work plan).

Line 5--Enter estimated engineering costs, such as surveys, tests, soil borings, etc.

Line 6--Enter estimated engineering inspection costs.

Line 7--Enter estimated costs of site preparation and restoration which are not included in the basic construction contract.

Line 9--Enter estimated cost of the construction contract.

Line 10--Enter estimated cost of office, shop, laboratory, safety equipment, etc. to be used at the facility, if such costs are not included in the construction contract.

Line 11--Enter estimated miscellaneous costs.

Line 12--Total of items 1 through 11.

Line 13--Enter estimated contingency costs. (Consult the Federal agency for the percentage of the estimated construction cost to use.)

Line 14--Enter the total of lines 12 and 13.

Line 15--Enter estimated program income to be earned during the grant period, e.g., salvaged materials, etc.

Line 16--Subtract line 15 from line 14.

Line 17--This block is for the computation of the Federal share. Multiply the total allowable project costs from line 16, column "c." by the Federal percentage share (this may be up to 100 percent; consult Federal agency for Federal percentage share) and enter the product on line 17.

# ASSURANCES -- CONSTRUCTION PROGRAMS



PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.

4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.

5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.

6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. Secs. 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. Secs. 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.

10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. Secs. 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. Secs. 794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. Secs. 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) Secs. 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. Secs. 3601 et seq.), as amended, relating to non-discrimination in the sale, rental or financing of housing; (i) any other non-discrimination provisions in the specific statute(s) under which application for Federal assistance is being made, and (j) the requirements of any other non-discrimination Statute(s) which may apply to the application.

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

12. Will comply with the provisions of the Hatch Act (5 U.S.C. Secs. 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. Secs. 276a to 276a - 7), the Copeland Act (40 U.S.C. Secs. 276c and 18 U.S.C. Sec. 874), the Contract Work Hours and Safety Standards Act (40 U.S.C. Secs. 327-333), regarding labor standards for federally assisted construction subagreements.

14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. Secs. 1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. Secs. 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).

16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. Secs. 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. Sec. 470), EO 11593 (identification and preservation of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).

18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.

19. Will comply with all applicable requirements of all other Federal laws, Executive Orders, regulations and policies governing this program.

| SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL | TITLE |
|---|---|
| [signature] | Partner |
| APPLICANT ORGANIZATION | DATE SUBMITTED |
| Surface Water Resources, Inc. | 4/16/99 |

SF 424D (Rev. 4/92) Back

I —014531

I-014531

U.S. Department of the Interior

# Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - **The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.** See below for language to be used; use this form for certification and sign; or use Department of the Interior Form 1954 (DI-1954). (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

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**PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions**

*CHECK ✓ IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.*

(1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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**PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions**

*CHECK ✓ IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.*

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

DI-2010
March 1995
(This form consolidates DI-1953, DI-1954, DI-1955, DI-1958 and DI-1963)

PART C: Certification Regarding Drug-Free Workplace Requirements

*CHECK ✓ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.*

Alternate I. (Grantees Other Than Individuals)

A. The grantee certifies that it will or continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an ongoing drug-free awareness program to inform employees about–
(1) The dangers of drug abuse in the workplace;
(2) The grantee's policy of maintaining a drug-free workplace;
(3) Any available drug counseling, rehabilitation, and employee assistance programs; and
(4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will –
(1) Abide by the terms of the statement; and
(2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

(e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant;

(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted –
(1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
(2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;

(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

455 Capitol Mall, Suite 600
Sacramento, CA 95814

Check___if there are workplaces on file that are not identified here.

PART D: Certification Regarding Drug-Free Workplace Requirements

*CHECK__IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.*

Alternate II. (Grantees Who Are Individuals)

(a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;

(b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction; to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

PART E: **Certification Regarding Lobbying**
**Certification for Contracts, Grants, Loans, and Cooperative Agreements**

*CHECK ✓ IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS $100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.*

*CHECK __ IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF $150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING $100,000, UNDER THE LOAN.*

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 

TYPED NAME AND TITLE David R. Schuster

DATE April 16, 1999

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